

Report of the Professional Development Task Force



California Department of Education Sacramento, 2002

Learning . . . Teaching . . . Leading . . .

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Publishing Information •

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Message from the State Superintendent of Public Instruction

"In a truly rational society, the best of us would be teachers, and the rest would have to settle for something less."

—Lee Iacocca

I do not recall the names of my textbooks or the names of the instructional programs that were being used when I was in school. I do remember the names of my teachers. They changed my life forever. They were, on balance, the most consistently exquisite group of professionals to whom I was ever exposed. Providing high-quality teachers for all students should be *Job One* in America today.

Clearly, it will do no good to have instituted rigorous academic standards if we do not have skilled educators who can successfully impart this knowledge to our students. Access to high-quality teaching—that is, teaching that is centered on the learners' needs, based on a deep understanding of the subject area, and linked to the community—is the foundation of our democratic society. It is at the core of our successful economy.

During my tenure as State Superintendent of Public Instruction, I have visited schools throughout California where I have seen firsthand the remarkable vitality and skill of many of our state's teachers and administrators. Now it is essential that we expand the pool of prospective educators, improve their preparation, and provide working conditions that encourage teachers and administrators to stay in the profession.

To this end, I convened the Professional Development Task Force to look at the entire learning-to-teach system in California and to look at the new initiatives that focus on teacher quality. I asked this distinguished group of educators to envision a comprehensive, aligned, and integrated statewide system that will develop and sustain a high-quality teaching and administrator workforce. By having studied what works in California, as well as what works in other states, the task force members have made recommendations regarding what constitutes a coherent system and suggested ways to create such a system in California.

I would like to thank the 40 members of the task force, who spent many hours working to develop this report's recommendations. I offer a special thanks to Linda Darling-Hammond, Stanford University Professor of Education, and Skip Meno, Dean of the School of Education at California State University, San Diego, for chairing the task force.

We all share the belief that effective leadership means coming together with other agencies and groups to plan, implement, and sustain important educational reforms. It means keeping what works and fitting the parts together into a coherent system. It means continuous support for the resources that schools need to develop quality educational programs. And it means paying teachers what they deserve; certainly, we never asked them to take vows of poverty when they entered the profession.

I urge policymakers, educators, parents, students, and community members to embrace and support these task force recommendations. Only through quality teaching and leadership will our educational goals be realized. We cannot afford to scrimp on providing our teachers and administrators, who are the linchpins of our public schools, with the resources they need. The fate of the republic as well as the strength of the economy will turn on our education system. We must give the matter of high-quality teacher recruitment and retention our full attention.

Delaine Eastin

State Superintendent of Public Instruction

Acknowledgments

The California Department of Education acknowledges the efforts of the following people in contributing to this report:

Professional Development Task Force Members

Linda Darling-Hammond

Co-Chair; Professor of Education

Stanford University

Lionel R. Meno

Co-Chair; Dean

College of Education

San Diego State University

Mike Aldaco

Executive Director

Mathematics • Engineering • Science

Achievement

University of California Office

of the President

Tony Alvarado

Chancellor

San Diego Unified School District

Nancy Anton

Principal Consultant

Representing State Senator Deirdre

Alpert

Brian Ausland

Professional Development Coordinator

Center for Distributed Learning

Butte County Office of Education

Gary Best

Associate Director

Teacher Education and K-18 Programs

Office of the Chancellor

The California State University

Bill Birch

Teacher

Etna High School

Etna Union High School District

Constance Carroll

President

San Diego Mesa College

Maria Casillas

President

Los Angeles Annenberg Metropolitan

Project

Rudy Castruita

County Superintendent

San Diego County Office of Education

Milton Chen

Executive Director

The George Lucas Educational

Foundation

Phil Daro

Executive Director

California Professional Development

Institutes

University of California Office

of the President

General Davie Jr.

Superintendent

San Juan Unified School District

Fran Fenical

Principal

San Dieguito High School Academy San Dieguito Union High School

District

Glenda Gentry

Executive Director

California Subject Matter Projects University of California Office

of the President

Note: The titles and locations of the persons included in this list were current at the time this document was developed.

Beth Graybill

Senior Policy Analyst

California Postsecondary Education

Commission

Susan Hammer

Vice President

State Board of Education

Guilbert Hentschke

Professor of Education

University of Southern California

Janet Holmgren

President

Mills College

Lisa Horwitch

Principal Consultant

Representing State Senator Deirdre

Alpert

Harvey Hunt

Retired Deputy Superintendent

California Department of Education

Linda Keating

Assistant Superintendent

Mono County Office of Education

Mike Kirst

Executive Director

Policy Analysis for California

Education

School of Education

Stanford University

Tanya Lieberman

Legislative Consultant

Representing State Senator Jack

O'Connell

Cecelia Mansfield

Vice President, Education

California State PTA

Kathleen McCreery

Assistant Executive Director

Professional Development and

Educational Collaboratives

Association of California School

Administrators

Ellen Moir

Executive Director

New Teacher Center

University of California, Santa Cruz

Jan Patrick Mongoven

2000 Teacher of the Year

San Marcos High School

San Marcos Unified School District

Kate Nyegaard

Board Member

Modesto City Schools Board of Education

Karen O'Connor

2000 Teacher of the Year

Sunset Hills Elementary

Poway Unified School District

Virginia Strom-Martin

Assembly Member

California State Assembly

Rosie Thompson

Business Unit Executive

K-12 Education, Western United States

IBM

Charles Tubbs, Jr.

Teacher

Representing California Teachers Association

Vera Vignes

Pacific Regional Director

National Center on Education and the

Economy

Granger Ward

Superintendent

Grossmont Union High School District

Jo Ann Yee

Executive Director

Association of California Urban School

Districts

Charlene Zettel

Assembly Member

California State Assembly

WestEd Staff Members

Nikola Filby

Coordinator

Regional Laboratory Program

Joan McRobbie

California Liaison

Aída Walqui

Director

Teacher Professional Development

Program

Rosemary De La Torre

Production Assistant

Editor

Spencer Kuroiwa

Jim Johnson

Administrative Assistant

Focus Groups for the Professional Development Task Force

The following persons participated in focus group meetings to review early drafts of the task force recommendations and provided additional insights and suggestions:

Principal Focus Groups

Fran Fenical

Principal

Professional Development Task Force

Member

San Dieguito High School Academy

San Dieguito Union High School

District

Gary Callahan

Principal

Douglass Junior High School

Woodland Joint Unified School District

Lynda Christian

Principal

Horace Mann Elementary School

Glendale Unified School District

Dean Clayman

Coordinator

Professional Development Consortia Orange County Office of Education

Duane Coleman

Principal

Oak Crest Middle School

San Dieguito Union High School

District

Ginger Eves

Principal

Madison High School

San Diego City Schools

Cristina Flores-Speer

Principal

Montgomery Elementary School

Chula Vista Elementary School District

Marco Gonzales

Principal

Cesar Chavez Elementary School

West Contra Costa Unified School

District

Merilee Holzhauser

Principal

Bryson Elementary School

Los Angeles Unified School District

Daisy Lee

Principal

C. K. McClatchy High School

Sacramento City Unified School District

Bill McKeever

Program Director

California School Leadership Academy

Christina Rivera

Principal

Santa Fe High School

Whittier Union High School District

Doug Smith

Principal

Helix High School

Grossmont Union High School District

Debbie Stark

Principal on Special Assignment Long Beach Unified School District

Norm Tanaka

Principal

Thomas Jefferson Elementary School Sacramento City Unified School District

Freeman Tinnin

Principal

Prairie Elementary School

Elk Grove Unified School District

Brad Tooker

Principal

Silverado Middle School

Dry Creek Joint Elementary School District

Trudy Torrence

Principal

Rio Vista Elementary School

El Monte City Unified School District

Russ Weikle

Principal

E.V. Cain Elementary School

Auburn Union Elementary School District

Christina Zarzana

Principal

Skycrest Elementary School San Juan Unified School District

Teacher Focus Groups

Nancy Alpert-Folger

San Juan Unified School District

John Andersen

Sacramento City Unified School District

Tony Camara

Grossmont Union High School District

Shannon Clark

Glendale Unified School District

Jane Crowden

San Juan Unified School District

Patti DeWitt

Glendale Unified School District

Cindy Douglas

Grossmont Union High School District

Karen Fetter

San Juan Unified School District

Joanne Finkler

Lake Tahoe Unified School District

Ann Foster

Elk Grove Unified School District

Mary Chris Glasgow

Sacramento City Unified School District

Julee Gould

Beverly Hills Unified School District

Susan Green

San Juan Unified School District

La Verne Harris

Sacramento City Unified School District

Gail Johnson

Sacramento City Unified School District

Jeff Keeney

Palos Verdes Peninsula Unified School

District

So Hee Kim

Walnut Valley Unified School District

Ann Leon

Galt Unified School District

Ginny Nicholas

El Dorado Union High School District

Lynne Pistochini

San Juan Unified School District

Gabriel Ramirez

Sacramento City Unified School District

Maria Russell

Elk Grove Unified School District

Scott Smith

Sacramento City Unified School

District

Wendy Theiss

San Diego City Unified School District

Michelle Theophilus

Elk Grove Unified School District

Virginia Tomsitz

Sacramento City Unified School

District

Rick Ubner

Moraga Elementary School District

Jennifer Wehner

Beverly Hills Unified School District

Mayer Wisotsky

Sacramento City Unified School District

Tim Zumwalt

West Contra Costa Unified School District

California Department of Education Staff Members

Leslie Fausset

Chief Deputy Superintendent for

Policy and Programs

Joanne Mendoza

Deputy Superintendent

Curriculum and Instructional

Leadership Branch

William V. Vasey

Director, Professional Development and Curriculum Support

Arleen Burns

Consultant

Curriculum Leadership

Jerilyn Harris

Manager

Professional Development

Jaymee Kjelland

Consultant

Professional Development

Debby Lott

Consultant

Reading and Language Arts Leadership

John Luster

Consultant

Professional Development

Jody McCarthy

Consultant

Professional Development

Mike McCoy

Manager

Academic Standards and Resources

Tom Rose

Consultant

Professional Development

Jean Treiman

Consultant

Professional Development

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The principal writers of this report are the members of the task force and **Nikola Filby. Janice Lowen Agee**, Executive Editor, California Department of Education, helped edit and prepare the report for publication.



Introduction

As Californians enter the twenty-first century, we face unprecedented educational challenges. Never in our history have schools been asked to educate so many students, with so diverse a range of learning needs, to such high levels of academic achievement. In our rapidly changing knowledge-based economy, skills that an industrial society once reserved for the gifted few are now essential for the many. Rather than process large numbers of students for vanishing low-skill manufacturing jobs that now comprise less than 10 percent of the economy, schools must now ensure that all students can manage complexity, use technologies, and solve problems at high levels. This requirement is especially true in California, "the nation's largest high-tech employer," where companies must seek employees from overseas because they cannot fill high-skill jobs from their local labor pool. More than 90 percent of all new jobs are "knowledge work" jobs for which we are still not adequately preparing our students.

In a typical California classroom, half the students are members of racial/ethnic minority groups or recent immigrants, at least 20 percent speak a first language other than English, and more than 25 percent come from families with incomes below the poverty line. Yet, while climbing enrollments, dramatically increasing linguistic and cultural diversity, and the growing effects of child poverty make it a challenge for teachers just to keep up, the demand is to do better—to help all students achieve to high academic levels. Schools are now being asked to prepare all students for the kinds of challenging content and complex tasks that have generally been reserved for those students identified for advanced programs and honors courses. Having clear and high standards for all students—focused on both results and the teaching and learning process to achieve them—requires a fundamental change in the nature of teaching, learning, and schooling. It will not be enough to ask educators simply to try harder within an antiquated system inherited from a century ago.

Only teachers who are knowledgeable in their content areas, diagnostic about learning, and skillful in using a wide range of teaching methods will be able to ensure that all of their students can meet these demanding

standards. And schools must provide a more intense focus on instruction, a more coherent curriculum, and more regular opportunities for staff collaboration if teachers are to accomplish the job of ensuring learning. Meeting these challenges depends above all on a high-quality workforce of teachers and administrators. Mounting research evidence confirms what the public believes: that educator quality is a more powerful influence than any other school resource. The overriding goal of this report, then, is to ensure that every child has well-prepared and capable teachers and school administrators.

An impressive body of research shows that students achieve at significantly higher levels when they are taught by teachers who have a deep knowledge of subject matter and strong preparation for teaching and who understand how students learn, how to support differing learning needs, and how to enable students to apply what they know to new problems. For example, when student achievement across 900 Texas districts was analyzed, teacher expertise accounted for far more of the explained variance in student scores in reading and mathematics than did any other single factor except for home and family factors (see Fig. 1). Similar findings about the importance of qualified teachers have been replicated in many other studies, including several in California. For example, who have a deep knowledge of subject and who understand how students and how to enable students to apply what they know to new problems. For example, when students achievement across 900 Texas districts was analyzed, teacher expertise accounted for far more of the explained variance in student scores in reading and mathematics than did any other single factor except for home and family factors (see Fig. 1). Similar findings about the importance of qualified teachers have been replicated in many other studies, including several in California.

Class Size Teacher **Home and Family Qualifications Factors** 43% 49% (licensing (parent education, examination income, language scores and background, race, and location) experience)

Figure 1. Factors affecting student achievement

Source: R. Ferguson, "Paying for Public Education: New Evidence on How and Why Money Matters," Harvard Journal of Legislation, Vol. 28 (Summer 1991), 465–98.

At the same time, there is growing recognition of the importance of skilled school leadership. School leaders are the key to creating school environments where teachers come together to teach well. Standards-based practice requires a whole new set of core leadership skills, including knowledge of teaching and learning, ability to manage collaboration, and an understanding of how to redesign schools for greater success. "Above all," states the Council of Chief State School Officers, "it requires a new level of leadership to provide the inspiration, know-how, drive, and endurance required to change the schools and raise student performance."

While California has many extraordinary educators, a large number of other educators are seriously unprepared to meet these challenges. By the late 1990s, California employed more underqualified teachers than did any other state in the country, and California ranked 45th or lower among states on student achievement in reading and mathematics, class sizes, staff-pupil ratios, libraries, and most other school resources.⁸

Clearly, no factor is more crucial for making our schools successful with a wide range of learners than is a cadre of caring and competent teachers working in schools organized to support their success, along with school leaders who know how to build and sustain learning communities. Indeed, all of today's educational problems depend for their solutions on ensuring a well-qualified teacher in every classroom, strong leadership in every school, and school conditions that enable educators' knowledge to be well used. There is an urgent need to create a strong professional system that recruits good people, builds their knowledge and skills, and puts them in schools designed for success.

Building a Coherent System

The Professional Development Task Force has recommended specific priority actions to strengthen professional development for teachers and administrators. However, a sustained, long-term effort is required. The ultimate goal is a coherent system of educator preparation based on standards and focused on teacher development and student-centered learning.

California policymakers have done a great deal of work in recent years to begin addressing these problems. The California Commission on Teacher Credentialing (CCTC) has laid the groundwork for a coherent standards-based system of entry and continuation in teaching based on standards that are widely regarded as some of the most forward-looking in the nation. The California Department of Education (CDE) has supported the creation of content-based professional development programs, such as the state's

Subject Matter Projects launched and expanded by the University of California; and CDE is implementing, in partnership with CCTC, a state-of-the-art program for mentoring beginning teachers. The Governor and Legislature of California have made recent investments in teachers' salaries and preparation that hold promise for reversing the years of decline. University presidents and the leadership of The California State University system, the University of California (UC), and private colleges have committed to expand and strengthen teacher preparation. In addition, the California School Leadership Academy provides extensive training for school leaders, and administrator preparation programs are being strengthened.

These initiatives, summarized in Table 1, have begun to make a difference and hold promise for broader impact (see Appendix B for more information). While much progress has been made, however, the number of underqualified teachers has steadily increased, and the inequality in the system has grown. The commitment to turn around the state's professional development system will need greater scope, scale, and coordinated effort. In many respects the prescriptions recently begun are appropriate, but the dosage is not yet adequate. Teacher quality needs to be a public priority for many years into the future if California is going to ensure that every child has a qualified and effective teacher.

This commitment has the public's support. Californians increasingly recognize these challenges and are willing to do what it takes to meet them. In a recent poll sponsored by the Center for the Future of Teaching and Learning, 87 percent of Californians cite "ensuring a well-qualified teacher in every classroom" as very important for improving student achievement (see Fig. 2). "Putting a qualified teacher in every classroom outpolls every other strategy for school reform tested," according to the poll. Eighty-three percent say they are willing to pay \$10 more in taxes to help increase teachers' salaries to the level of other professions.

To build a stronger *system* of educator quality, we need to look not only at the quality of individual programs but also at the comprehensiveness, consistency, and connections among them. We will know that we have developed a coherent system when:

- Policies and programs focus consistently on the common goal of enhanced student learning.
- Policies and programs address all of the system components in mutually reinforcing ways—they do not miss key areas or work at odds with one another.

Table 1. Summary of Selected California Professional Development Programs

Program and Education Code (EC) Sections	Start Date	2001-02 Funding (in millions)	Focus
Teaching as a Priority (EC 44735)	7/5/00	0	Recruitment incentives for districts with schools in Academic Performance Index (API) decile 1–5
Assumption Program of Loans for Education Expansion (EC 69612 et seq)	10/2/85	\$12	Assumes student loans for prospective teachers who agree to teach in high-need areas
CAL T Grants (EC 69440, 69530 et seq)	4/30/77	\$10	Grants for baccalaureate degree student enrolled in teacher preparation courses
Governor's Teaching Fellowships (EC 70000 et seq)	7/5/00	\$21	Incentives for teachers in API decile 1–5 schools
Beginning Teacher Support and Assessment (BTSA) (EC 44279.1 et seq)	Statutes of 1988	\$85	Two-year mentoring for beginning teachers
Peer Assessment and Review (EC 44500 et seq)	6/25/99	\$84	Support for beginning and veteran teachers
CalTeach (EC 90530 et seq)	10/10/97	\$11	Statewide recruitment information center
Teacher Recruitment Incentive (EC 44751 et seq)	7/5/00	\$9	Regional Teacher Recruitment Centers
Miller-Unruh (EC 2000 et seq)	1965	\$28	Reading specialists' salaries
School Improvement Program (EC 62000 et seq)	9/17/77	\$418	Professional development related to school development plans
Middle School Demonstration Programs (EC 62000 et seq)	4/30/77	\$6	Alignment with state standards
California School Leadership Academy (EC 44681 et seq)	9/24/82	\$7	12 regional centers provide professional development for administrators
California Professional Development Consortia (EC 44680 et seq)	Statutes of 1988	\$4	11 regional consortia assist with professional development to districts
California Subject Matter Projects (EC 99200 et seq)	Statutes of 1988	\$35	Multiple subjects, two- to three-week summer sessions, school terms
School Site Professional Development (EC 44670.1 et seq)	Statutes of 1977	\$17	High school professional development
Instructional Time and Staff Development Reform (EC 44579 et seq)	8/21/98	\$224	Reimburses districts for up to three days of professional development
Gifted and Talented Education (EC 52200 et seq)	9/18/89	\$55	Professional development and other needs related to gifted and talented education
Governor's Performance Awards (EC 52056 et seq)	6/25/99	\$144	Schoolwide award for exceeding API goal; may be used for professional development
Advanced Placement (AP) Challenge Grant Program (EC 52247)	7/5/00	\$17	Increases access to AP courses, some professional development
California Professional Development Institutes (EC 99220 et seq)	1999	\$99	UC-provided professional development for reading, mathematics, and English-language learning, with priority given to beginning and non-credentialed teachers
National Board for Professional Teaching Standards (NBPTS) (EC 44395 et seq)	8/21/98	\$10	Incentives for teachers who earn NBPTS certifica- tion, with additional incentives for teachers in API decile 1–5 schools
High Priority Schools Grant Program for Low-Performing Schools (EC 52055.600 et seq)	10/12/01	\$38	Professional development available for schools in first API decile
Immediate Intervention/Underperforming Schools Program (EC 52053 et seq)	6/25/99	\$161	May support professional development for schools that did not meet their API goals
Intensive Professional Development in Reading and Mathematics (EC 99230 et seq)	10/11/01	\$32	All teachers in reading and math

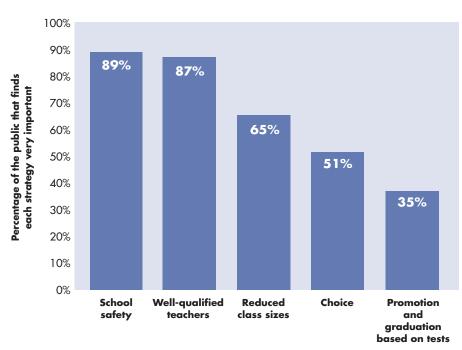


Figure 2. Percentage of the California public that agrees with various strategies for improving public schools

Source: Data from D. Haselkorn and L. Harris, *The Essential Profession: California Education at the Crossroads*. Belmont, CA: Recruiting New Teachers, Inc., 2001, p.10. The study was commissioned by the Center for the Future of Teaching and Learning.

- Policies and programs support all schools, teachers, and leaders without gaping loopholes or widespread inequalities.
- State quality standards and processes are used to build systemwide capacity so that schools, universities, and districts become more capable of producing and sustaining quality.
- A stable, reliable infrastructure for professional learning is created and maintained.
- Data are regularly used to assess the system's quality and target needed improvements.

Many stakeholders have important roles to play to continue to strengthen this system. State policymakers need to develop a comprehensive plan and allocate resources to build the system. Local districts and school boards need to align personnel policies and create structures that support careerlong learning. Universities need to commit to educator development as a priority and work to strengthen K–16 collaboration. Professional organi-

zations need to provide a collective voice for quality and professional accountability and work to keep public attention on the goal.

To ensure that *every* child is well served, special attention needs to be paid to equity across California's education system. Recent research paints a stark picture of inequities in the current system.¹⁰ In more than 20 percent of the state's schools, more than 20 percent of the teachers are underqualified, and the schools are disproportionately in high-poverty communities with a large proportion of students of color and English language learners (see Fig. 3). These schools lack the human and material resources needed to create a productive learning environment. The unequal distribution of qualified teachers is a major source of the growing achievement gap in California. According to a recent analysis, "Over the past six years, this relationship (between socio-economic measures and achievement scores) has strengthened, not diminished."11 Coherent, student-focused, long-term plans for action, targeted resources, and special incentives are needed to reverse this trend and create a critical mass of qualified staff to achieve success. Therefore, many major recommendations in this document target high-need schools and communities.

30% 27% 25% 23% 20% 15% 10% 5% 5% 4% 0% **>90**% Highest Lowest <30% minority achievement minority achievement quartile quartile students students

Figure 3. Proportion of underqualified teachers

Source: Data from P. M. Shields et al., The Status of the Teaching Profession: Research Findings and Policy Recommendations. Santa Cruz, CA: The Center for the Future of Teaching and Learning, 1999.

Recommendations

The Professional Development Task Force recommends that California take the steps necessary to:

Make teaching and school administration attractive careers.

- 1. Increase salaries for teachers and administrators.
- Strengthen multiple pathways into teaching and school leadership. Actively recruit high school students, college students, paraprofessionals, and mid-career entrants.
- 3. Enable schools that serve high-need students to attract and keep well-qualified teachers and administrators.
- 4. Eliminate emergency permits and waivers within five years.

Provide teachers and school leaders with the skills they need to improve student learning.

- 5. Enhance the capacity of colleges and schools to prepare teachers well in high-need fields.
- Build a statewide infrastructure for career-long professional development that supports educator learning and school improvement.
- 7. Ensure that high-quality professional development reaches teachers and administrators in high-need communities.
- 8. Improve the preparation, induction, and ongoing support of school leaders so that they are able to lead schools that successfully support student learning.

Create the conditions that allow teachers and school leaders to succeed.

- Reconfigure site leadership to enable the principal to serve as an instructional leader and to support the development of teacher leaders who can coach and mentor others.
- Redesign schools so that they can focus on student and teacher learning. Add and reorganize time to enable collaborative teacher planning and inquiry.

The following report expands on these recommendations and describes what actions are necessary to implement them.

Make

Teaching and School Administration Attractive Careers

1

Increase salaries for teachers and administrators.

A large number of individuals are prepared for teaching in California: For the state's 300,000 teaching jobs, there are more than one million credential holders—however, most of them are not currently teaching. Shortages exist in many fields and locations, partly because teaching conditions in many communities are inadequate to entice and keep talented people in education. Adjusted for the cost of living, California teacher salaries fall below the national average and even further below the salaries offered in other professional fields (see Fig. 4). These disparities are largest in mathematics,

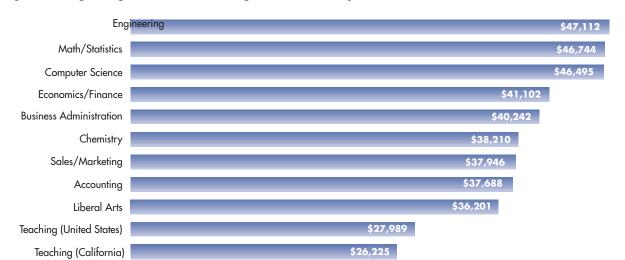


Figure 4. Beginning salaries in teaching and other occupations

California's beginning teacher salary in 1999-2000 was \$32,190, according to the annual survey of state education departments conducted by the American Federation of Teachers (AFT). But a cost-of-living adjustment is necessary to compare state salaries to national averages for teachers or other professions. The AFT developed the cost-of-living index using data from the nation's Standard Metropolitan Statistical Areas, as explained in *Educational Evaluation and Policy Analysis* (Spring 1991). The adjustment for California requires reducing salaries by 18.53 percent.

science, and technology and contribute to growing shortfalls of teachers—and student achievement suffers.

Among the certified teachers available to enter the California labor market each year, most of those who take jobs are recruited to better-funded districts with higher levels of support. Overall, there are too few candidates in mathematics, science, and special education. Teachers prepared in California often leave the state or enter other careers when they confront the realities of salaries and working conditions, and attrition rates are higher in California than nationally. The re-entry rates of teachers from the reserve pool (i.e., those with California teaching credentials but not currently teaching) are also strongly related to changes in salaries and working conditions.

As a share of education expenditures, California teacher salaries were 39.5 percent in 1999–2000, ranking 22nd in the nation.¹⁴ While recent legislative incentives to raise salaries have begun to make a difference, a wide gap still exists between what individuals can earn in teaching and what they can earn in alternate careers. There are also wide disparities in salaries across districts that create shortages in some places and surpluses in others.

Finally, most salary schedules are flat, so teachers fall further behind their counterparts in other professions the longer they stay in teaching. Teachers have little opportunity during the school year to learn more about how to teach well in their content areas and to plan more effective curriculum together. And few rewards exist for acquiring greater knowledge and skill or for going the extra mile in terms of performance.

Administrator salaries in California also lag behind those elsewhere. The average salary of a California school principal is only slightly higher than the national average despite the fact that the cost of living here is generally higher. In addition, California principals have more demanding jobs than their counterparts have in other states. For example, the ratio of teachers to site administrators in the fall of 1999 was estimated at more than 23 to 1, compared with a national average of 21 to 1.16

Action: Needed

Continue to increase compensation for beginning and veteran teachers and administrators to levels that are competitive with occupations requiring similar training.

States that have solved teacher shortages have made a concerted effort to raise and equalize teacher salaries across districts. They have simultaneously created incentives for candidates to become well qualified and for districts to hire well-qualified teachers. The states have recognized that without a skillful teaching and administrator workforce, no other reforms can succeed, and they have invested their resources accordingly. For example, Connecticut—a state which now consistently ranks in the top tier on the National Assessment of Educational Progress (NAEP) in reading, writing, mathematics, and science—has invested in well-prepared teachers for 15 years. When it launched its reforms in 1986, Connecticut raised average teacher salaries from \$29,437 to \$47,823 over five years, a 62 percent increase. Within three years, teacher shortages in urban areas had turned to statewide surpluses, which have continued since then. Connecticut's approach was successful for several reasons:

- Salary aid helped all districts while giving a greater boost to those with the greatest needs.
- The aid was allocated on the basis of fully certified teachers so that districts had an incentive to hire well-qualified teachers.
- Salary aid was combined with increases in standards and supports for teacher education, mentoring for beginning teachers, and ongoing professional development so that teachers were becoming more expert while they were also becoming better paid. These investments increased teachers' competence and decreased attrition, yielding a more effective and stable teaching force while reducing shortages.

California has made important recent investments in teachers' salaries along with providing some support for housing, tax relief, and retirement. These efforts need to be continued and expanded until teachers' compensation is comparable to that of other college-educated workers. Adjusting for the current length of the teacher work year, the investment would require an increase of at least 20 percent to reach the minimum salaries of college graduates in the liberal arts, business, or accounting. In the words of a task force focus group teacher:

This isn't just a job; it's a profession. The pay is important. I want to be able to invite my friends and other people into the profession.

Salary adjustments for costs of living and educational challenges—for example, the proportion of students who are low-income or English language learners—are also important to ensure that all districts can hire qualified personnel. Ongoing state salary aid for hiring qualified teachers should level the playing field and overcome differences in district wealth, costs of living, and costs of education. On the local level, allowing teachers to transfer years of experience when they change districts would enable accomplished teachers to take on new assignments and give them more career development opportunities.

Create salary scales that allow for a longer professional year and compensation models that are based on knowledge and skills.

Compensation reforms could improve salaries and acknowledge the time and energy teachers spend honing their skills by giving districts incentives for negotiating a **professional teaching year** that couples higher-than-usual salary increases with additional days for professional development and curriculum planning. Incentives for districts to develop a longer professional teaching year that compensates teachers more comparably with members of other professions and simultaneously increases their time for teaching, learning, and redesigning curriculum would improve the quality of education while keeping teachers in the profession.

Finally, if talented teachers are to stay in the profession, they need to be recognized and rewarded as they demonstrate higher levels of expertise and take on leadership roles. Salary systems should promote ongoing learning and recognize outstanding performance. California's stipends for National Board Certification—\$10,000 to all recipients and an additional \$20,000 to those who teach in low-performing schools—are an important step in this direction and should be continued. Some states and districts, such as Cincinnati, Ohio, and Denver, Colorado, are creating compensation systems that incorporate pay for knowledge, skills, and performance throughout the teacher's career. Districts such as Los Angeles offer a 15 percent salary schedule increment for National Board Certified teachers. Other districts are also creating salary systems that identify several stages of accomplishment from novice to advanced and that reward accomplished teachers who take on instructional leadership roles. Encouraging these kinds of compensation systems will be increasingly important as California develops its capacity to improve teaching and enhance retention through mentoring, peer coaching, and professional development.

2

Strengthen multiple pathways into teaching and school leadership. Actively recruit high school students, college students, paraprofessionals, and mid-career entrants.

In 1970, California became the only state in the nation to eliminate an undergraduate degree in education. Although this decision spurred the development of some very strong graduate-level teacher education programs, it also limited the supply of teachers by making it difficult for many young people to get the information and guidance they needed to enter teaching when they were considering careers in high school, community college, and college. It had the unintended consequence of discouraging undergraduate programs that could integrate the learning of content and teaching methods. And while post-baccalaureate programs are useful to recruit mid-career entrants into teaching, not all of those seeking to enter from other careers can readily access programs that help them make the move.

Recent legislative and regulatory changes that encourage blended programs of content and professional study beginning in the undergraduate years will provide new options for recruiting people into teaching. The task ahead is to create a larger supply of high-quality pathways and programs that will engage prospective teachers at different points in their careers and prepare them well.

In 1998, CCTC sponsored legislation that reformed the way California evaluates the credentials of teachers prepared outside California. The effect of these changes has been very favorable. In many cases, if teachers have finished teacher preparation in an accredited out-of-state institution, they receive a preliminary credential in California. This is a credential that grants a five-year window for candidates to complete any requirements that are not comparable to those of California. National Board Certified teachers receive a full Professional Clear credential and are not required to complete additional requirements.

The need to recruit school administrators is also acute. In 1999, more than 75 percent of California superintendents surveyed by the Association of California School Administrators (ACSA) said that they had had difficulty finding candidates for the last principal position they had advertised. Many individuals who hold administrative credentials are not pursuing

administrative positions, citing the fact that compensation is not commensurate with the stress and complexity of the job and that they do not feel adequately prepared and supported for the demands they face. As more California principals near retirement, the shortage will grow even more acute. In 1990, for example, 64 percent of the state's principals were 45 or older; by 1996, more than 80 percent were.¹⁷

To encourage candidates and ease entry into education, California has established CalTeach, a one-stop information center that conducts outreach and provides information on preparation programs and job openings by phone and on its Web site. An extended marketing plan is under way to promote education careers. Regional teacher recruitment centers were recently established under the Teacher Recruitment Initiative Program (TRIP).

Actions Needed

Expand information, resources, and incentives to introduce high school and community college students to teaching as a career and provide smooth and cost-efficient transitions into preparation for college students and mid-career entrants.

High School Pathways: California should build on existing high school support programs, such as Mathematics, Engineering, Science Achievement (MESA), Advancement Via Individual Determination (AVID), and Future Teachers of America, to develop high school recruitment initiatives. Like the successful South Carolina Teacher Cadet Program, these can offer courses in teaching, teaching assistant and tutoring opportunities, guidance into preparation programs, and access to scholarships for academically talented high school students who are interested in teaching.

Community College Pathways: Incentives are needed for more colleges to develop articulation agreements that allow community college candidates to transfer selected subject matter and teacher education courses into four-year college preparation programs. The California Teacher Reading Development Partnership, which funds teaching courses and tutoring opportunities to encourage community college students to pursue teaching careers, and the California School Paraprofessional Teacher Training Program, which prepares teacher aides to teach through partnerships between community colleges and four-year colleges and universities, should be expanded.

College Pathways: New teacher education "blended" programs that begin early in the undergraduate years should be created, providing opportunities for student to connect their study of subject matter to their teaching preparation. Loans and scholarship aid for candidates who enroll in these programs should be expanded.

San Diego Partnership

A K–16 partnership in San Diego addresses the entire continuum of the teaching profession—from recruitment to teacher preparation to induction to ongoing development. In collaboration with Mesa College, faculty at San Diego State University and teachers in the San Diego Unified School District jointly developed a course titled "Introduction to the Teaching Profession." The course includes a fieldwork requirement in which students observe excellent teaching models in local public schools. This introductory course launches an articulated pathway into a new, blended, multiple-subject credential undergraduate program that prepares students in five years (from freshman year through a masters degree). In this program, students study content and teaching methods in tandem, engage in fieldwork—including a full year of student teaching—and consider multicultural education throughout.

Mid-Career Pathways: The number of post-baccalaureate programs focused on providing support for mid-career entrants into teaching should be expanded.

Communicate recent changes in equivalencies for out-of-state credential holders. Continue to expand reciprocity and enable teachers to return from the reserve pool.

Out-of-State Pathways: The CCTC has done a thorough study of state credentialing programs to evaluate their comparability with California's standards and requirements. The resulting list of equivalencies is complex and must be fully and carefully communicated. For example, one program in a state may be accepted as comparable while another may not. In addition, even well-prepared candidates admitted through equivalencies must

still complete California requirements that do not exist elsewhere. Legislative action is needed to remove add-on requirements such as the *California Basic Educational Skills Test (CBEST)* and health education. More generous means of evaluating equivalence (e.g., accepting more rigorous subject matter tests in lieu of basic skills tests) would then increase the number of states from which California could recruit and the number of experienced teachers willing to relocate.

Reserve Pool Pathways: Salaries, working conditions, and transition requirements can all affect teachers' re-entry rates. The task force heard testimony from some individuals who felt current re-credentialing requirements were a barrier to their return. Experienced teachers who currently hold California credentials but who are not in the classroom should be surveyed about what incentives would be needed to induce them back into teaching.

Provide financial incentives, training grants, and accessible programs to encourage well-qualified individuals to pursue administrative careers.

Administrator Recruitment: A multipronged effort is needed to ensure that California has enough well-prepared administrators. This effort should include financial incentives to enter and complete productive preparation programs. These training subsidies need to be coupled with proactive recruitment strategies so that districts identify talented teachers with instructional leadership potential and prepare them well (see Recommendation 8).

3

Enable schools that serve high-need students to attract and keep well-qualified teachers and administrators.

In 2000-01, more than 49,000 underqualified teachers worked in California's schools, substantially more than in any other state. In addition to 34,670 teachers working on emergency permits, 3,348 teachers were working on waivers without having passed even *CBEST*, the prerequisite for an emergency permit. Almost 6,400 teachers were hired on intern credentials, and 5,200 teachers worked on preintern credentials. In some schools, the proportion of underqualified teachers reached well over half of the staff.

These numbers have risen steeply over the decade and have contributed to growing inequality in students' opportunity to learn. Students in schools in the lowest achievement quartile on the Academic Performance Index, the state's accountability measure, are almost *five* times as likely to have underqualified teachers as students in schools in the highest quartile have. ¹⁹ Students in high-minority schools are almost *seven* times as likely to have underqualified teachers as do those in low-minority schools.

Expert leadership is also hard to attract to high-need schools. The challenges of urban poverty or rural isolation make it hard to recruit highly capable candidates. State accountability programs that make the administrator responsible for student performance intensify these challenges.

Incentives and supports are needed. Until recently, few incentives existed for prospective teachers to prepare to teach or to enter the fields and locations where they are most needed. California scholarships and loans for teacher preparation are still relatively small compared to those of other states with similar needs.

Urban districts that most need teachers often lack efficient, technology-supported recruitment and hiring systems. One-fourth of the state's newly hired teachers in 1998 were hired after the start of the school year, 20 mostly in these urban districts. Some districts prefer to hire lower-cost teachers, even if they are unqualified, to save money. As a result, many fully prepared teachers become frustrated and do not enter teaching in California. Others teach briefly and then drop out if they do not feel supported.

A key factor behind these decisions is the working conditions found in the state's high-poverty, low-performing schools. A recent California Teachers' Association report found that such schools are markedly larger, have more

crowded facilities, and are more likely to be running on year-round schedules. Districts with the neediest students generally pay less than other districts in their labor markets and provide the fewest supports in terms of class sizes, materials, resources, and equipment. And in California, as elsewhere, teachers say that their decisions about whether and where to teach are strongly influenced by administrative leadership and working conditions as well as salaries.

Members of task force teacher focus groups reported "deplorable" working conditions in some schools and confirmed the influence this has on their decisions about whether to stay in teaching. They also discussed the importance of small schools and classes. Thirty years of research demonstrate that, all else being equal, small schools and school units (between 300 and 500 students) where teachers and principals know students well produce higher student achievement, lower dropout rates, less violence and alienation, and stronger student participation than do larger schools.

High-poverty schools that are very successful allow teams of teachers to plan together and work with the same students over multiple years. They create a coherent curriculum and establish connections with parents.²¹ Teachers want to teach in functional organizations that allow them to be successful.

Principals in the task force focus groups also noted that school size is a major problem in preventing them from building a strong learning community:

My high school has 2,500 students, and it was built for 1,500. It is clear that smaller high schools are more successful, so we are redesigning our school and trying to build in smaller learning communities. Currently, I have 13 traveling teachers, a facility that is almost impossible to maintain with so much traffic, and a school that is way too big to do a good job.

-Principal, Focus Group

Because high-need schools are more often large, year-round schools, the number of new teachers in high-need schools increases the supervision and evaluation load for administrators. To reduce the concentrations of underqualified educators in the state's neediest schools, California needs to provide more supportive conditions where the challenges are greatest.

Actions Needed

Expand Cal T Grants, Assumption Program of Loans for Education (APLE) loans, and Governor's Teaching Fellowships to encourage teachers and administrators in high-need areas to teach in high-need locations. Provide stipends for student teachers to complete preparation before becoming the teacher of record.

Existing service scholarship and loan programs (Cal T, APLE, and Governor's Teaching Fellowships) should be expanded to support at least 15,000 newly prepared teachers annually in teaching, with incentives for teaching in high-need schools, including low-income, hard-to-staff, or underperforming schools. Recipients of Cal T grants and APLE awards as well as other students who demonstrate need should receive stipends for student teaching. Larger supplements should also be available for teaching in high-need fields, especially mathematics, science, and special education. Increasing subsidies for teacher preparation to \$100 million annually—targeted through service awards favoring high-need fields and locations—could, with improvements in salaries and working conditions, essentially eliminate California's current teacher shortages.

Similar incentives are needed to attract and keep talented administrators.

Expand incentives for local school districts to improve working conditions in schools that serve high-need students (e.g., smaller schools and classes, teaching teams, time for co-planning and professional development, and high-quality mentoring).

California should expand the Teachers as a Priority (TAP) Block Grant program that funds incentives to attract and retain fully credentialed teachers in low-performing schools. Schools should be encouraged not only to reduce class sizes and improve working conditions but also to redesign schools so that they allow more personalization and more powerful learning.

Provide additional incentives for National Board Certified teachers and other teacher leaders to work in and redesign schools in high-need areas, and create incentives to attract well-prepared administrators to high-need schools.

Existing incentives for National Board Certified teachers to work in high-need schools should be coupled with funding for school redesign to encourage expert teachers to join together in designing new schools for underperforming students. Funds to attract expert teachers and leaders should be allocated to schools based on student income and need (e.g., English language learners) so that schools will not have to remain low-performing to keep the teachers they have hired and so that new schools serving these students will be able to attract good teachers. A program such as the Governor's Teaching Fellowships should be created to underwrite preparation for talented teacher leaders to become school administrators in high-need schools.

4

Eliminate emergency permits and waivers within five years.

The number of emergency permits quadrupled between 1995-96 and 2000-01—from 8,604 to 34,670. The number of emergency permits and waivers issued in 2000-01 was more than 38,000. Furthermore, many more teachers in intern and pre-intern programs are underprepared for the realities of the classroom. In total more than 49,000 teachers in California classrooms in 2000-01 did not hold full credentials.²²

The growth in demand for teachers was fueled by growing enrollments and class size reduction, while supply has been reduced by retirements and other attrition. Meanwhile, the unequal allocation of teachers worsens each year. While the proportion of California schools staffed only with fully qualified teachers has been increasing, the share of schools in which more than 20 percent of teachers are underqualified has also been increasing.²³ These schools mostly serve children of color, whose life chances may be impaired by short-term, underprepared instructors.

Schools with many underprepared teachers have little instructional expertise on their staff and few expert teachers to help novices. As a recent study by the Center for the Future of Teaching and Learning noted, "In such schools, teachers and administrators are hard pressed to provide adequate professional support to their entire faculty. In these hard-to-staff schools, a child's opportunities to receive the kind of instruction needed to meet the state standards are severely compromised."²⁴

A major source of this problem is that the salaries and working conditions offered are not adequate to attract and keep individuals in teaching, especially in these schools. A second source of the problem is the continuation of shortfalls in subjects such as mathematics, science, and special education. While 10 percent of all California secondary teachers are underqualified, the proportions are 14 percent in mathematics and physical science and 12 percent in life science.²⁵ In special education, the number of emergency permits issued in 1998-99 was 5,200, up from 3,200 the year before, while only 2,500 special education credentials were issued in 1998-99, down from 2,700 the year before.²⁶

A third problem over the last decade is that California has developed a culture and incentives that encourage entry into teaching without

preparation. Many candidates are advised that they can enter teaching without a credential and pick one up later if they decide to stay. Unfortunately, this practice encourages individuals to enter before they can be effective and undermines the likelihood that they will ever become adequately prepared. It also decreases the likelihood that they will stay in teaching.

Until 1999, when subsidies for preparation were expanded, most financial incentives in the state favored entry without prior study. As a consequence, the percentage of teachers completing preparation before entering teaching dropped precipitously, from 78 percent in 1991-92 to 52 percent in 1998-99.²⁷ And districts' financial problems have led some to hire inexpensive, unprepared teachers even when more expensive, fully prepared teachers are available. In California the regulatory system does not preclude this practice as other states do.

The problem of emergency hiring cannot be cured by waving a magic wand. Ensuring that all California students are taught by well-prepared teachers will require making teaching in hard-to-staff schools more attractive by offering better salaries, improving working conditions, mentoring, and developing a different strategy for managing the teacher labor force.

Actions Needed

Develop an action plan to eliminate emergency permits and waivers within five years. Evaluate labor market conditions and identify the resources, incentives, and supports needed to enable all districts to recruit and hire qualified teachers.

Set goals and timeframes. It is important to set goals and timeframes to mobilize the necessary will and resources. An explicit public policy focus can motivate attention to this critical problem and help the state focus on an agenda to solve it. Setting a goal will also begin to change the prevailing culture that dissuades many candidates from seeking preparation and some districts from hiring prepared candidates.

Develop a plan based on careful analysis of California's labor market.

Other states that have ended emergency hirings have pursued a multipronged approach: raising and equalizing salaries across districts; increasing subsidies to candidates and colleges for training in shortage fields; expanding reciprocity; improving retention through better preparation, mentoring, and working conditions; creating salary incentives that reward candidates for becoming well-prepared and districts for hiring them; and enforcing certification laws while assisting districts in recruiting more effectively. California has begun to enact a number of these strategies, though not at a scale and in a combination sufficient to solve the problem. A study should be commissioned to analyze the state's labor market needs and trends, the outcomes of recently enacted reforms, and the problems and practices in hard-to-staff districts. This study should identify the resources, incentives, and supports needed to enable all districts to recruit and hire qualified teachers. A critical need will be state support of a data system that allows ongoing monitoring of teacher supply and demand and labor market trends.

Evaluate sources of difficulties in districts that hire large numbers of underqualified teachers and develop remedies to improve hiring outcomes. Publicly report a Teacher Qualifications Index for all schools annually.

The examination of hiring practices and needs in districts with the highest proportions of uncredentialed teachers should focus on developing appropriate state and local remedies for improving hiring outcomes. State salary aid should be tied to hiring fully credentialed teachers and create incentives for hiring prepared teachers in high-need schools. California should develop an annual Teacher Qualifications Index that gives school and district information, such as the numbers of emergency permit teachers and the number of National Board Certified teachers.

Provide incentives to districts for updating and streamlining hiring processes, for hiring fully qualified teachers in a timely manner, and for placing fully qualified teachers and administrators in hard-to-staff schools.

A state fund should be created to support large, high-need districts in upgrading their personnel departments (including technology), expanding their recruitment capacities, and streamlining their hiring processes.

Prohibit the disproportionate assignment of emergency-permit teachers to schools identified as lowest performing.

California needs to become immediately accountable for providing more qualified teachers to students in its lowest performing schools. Schools in the bottom achievement quartile on the Academic Performance Index should be prohibited from employing more than the state average

proportion of teachers on emergency permits or waivers. As happened in New York state, which recently prohibited the assignment of any uncredentialed teachers to its lowest performing schools, this measure should stimulate more aggressive recruitment, earlier hiring, stronger supports for teachers, new leadership, and new teaching incentives.

Provide

Teachers and School Leaders with the Skills They Need to Improve Student Learning

5

Enhance the capacity of colleges and schools to prepare teachers well in high-need fields.

Exemplary teacher education programs, across institutional types, that prepare teachers who successfully teach diverse learners to high standards share the following features:²⁸

- A common, clear vision of good teaching that is apparent in all course work and clinical experience.
- Well-defined standards of practice and performance that guide and evaluate course work and clinical work.
- A rigorous core curriculum emphasizing learning, development, content pedagogy, and assessment.
- Extensive use of problem-based methods, including cases and case studies, teacher research, performance assessments, and portfolio evaluation
- Intensely supervised, extended clinical experiences, including at least 30 weeks of teaching together with master teachers who illustrate the ideas presented in simultaneous, closely interwoven course work.
- Strong relationships with reform-minded local schools that support the development of common knowledge among school- and university-based faculty. Often these are professional development schools that operate like teaching hospitals to offer state-of-the-art learning opportunities for students and novice and veteran teachers. The schools are frequently located in high-need urban areas, where they recruit and prepare teachers to succeed with diverse students.

Pressure to cut corners. While California has high-quality programs with those characteristics, recent reforms, rather than emphasizing improved teacher preparation, have focused on increasing the quantity of teachers by reducing the duration of teacher education and eliminating the requirement that it occur before teachers practice. Studies by the Center for the Future of Teaching and Learning have described the push to shorten student teaching and to substitute emergency permits for student teaching altogether, despite the fact that research identifies practice teaching as one of the most important components of preservice preparation.²⁹ These studies also point to pressures that undermine teacher education quality as programs are asked to train practicing teachers in a few hours of classes each week.

In the past year, some two-year post-baccalaureate programs have reverted to one-year programs, and some planned five-year models have reverted to four-year models that other states have begun to abandon—programs with front-loaded, disconnected course work followed by a short dose of student teaching. Some internship programs are offering fewer content-related courses and less supervised clinical practice, and candidates increasingly enter teaching on emergency permits and then pick up credits as they work. Recent studies show that teachers who enter the profession without completing a coherent program feel much less prepared; many say they would change their decision if they could do it again.³⁰

Inadequate capacity. Despite rising demand from applicants who want to enter teacher preparation programs, some CSU campuses, hampered by budget limitations, have previously had to turn away qualified applicants.³¹ While the UC and CSU systems have increased enrollments and the Legislature has increased support, funding for teacher preparation programs has not been adequate to support the needed growth of all programs, nor has it always been targeted to the campuses and subject area programs where the needs are the greatest.

New opportunities. Despite these problems, California is well positioned for significant reform. Recent efforts to encourage blended programs create new opportunities for colleges and universities to expand training in areas of high need, combine undergraduate and graduate studies, connect content and pedagogy, and create more extended clinical practice experiences. These changes could enable campuses to create the more powerful, integrated four-and-a-half to five-year blended programs that have proved successful elsewhere in the country.

Programs that provide a bachelor's degree in a disciplinary field and link it with the study of teaching at the undergraduate and graduate level are

often better able to resolve several traditional dilemmas of teacher education. They create time to study both subject matter and pedagogy. They allow for much more extensive clinical experience—typically 30 weeks or more rather than the traditional 10 to 12 weeks of student teaching. And they reduce curriculum fragmentation by interweaving course work with practical experiences, rather than front-loading theory disconnected from practice.

Studies have found that graduates of these blended five-year teacher education programs are more satisfied with their preparation; are more highly rated by their colleagues, principals, and cooperating teachers; are as effective as much more experienced teachers are with students; and are much more likely to enter and stay in teaching than are their peers who prepared in traditional four-year programs.³² In fact, the entry and retention rates of these programs are so much higher than those of four-year programs—which in turn are much higher than short-term alternative programs³³—that it is actually less expensive to prepare teachers in this way. Taking into account the costs of preparation, recruitment, induction, and replacement due to attrition, the cost of preparing a teacher in a five-year program is significantly less than preparing more teachers in shorter-term programs who are less likely to stay.

Many California campuses have begun to move toward creating these programs. In addition, California campuses pioneered the development of two-year post-baccalaureate preparation models. These programs develop sophisticated, student-centered practices by tightly linking theory and pedagogical course work to extensive and intensively supervised clinical practice in both traditional and carefully designed internship training models. New community college connections provide additional innovations in a growing number of areas. What is needed are incentives for these programs to continue and spread.

Actions 1 leeded

Expand incentives for universities, colleges, community colleges, and school partners, working in collaboration, to create and expand blended program models and post-baccalaureate models that include features shown to produce more effective teachers.

A number of teacher education programs in California in the CSU and UC systems and in private institutions illustrate the principles of high-quality teacher education. These diverse programs all feature a rigorous curriculum

and strong school-university partnerships, emphasize effective methods for teaching challenging content to diverse learners, ensure strong modeling and coaching from expert practitioners in settings that reflect state-of-the art practice, and use clear standards with performance-based assessments. States such as Connecticut, Maryland, North Carolina, Ohio, and Colorado have funded five-year programs, professional development schools, and year-long student teaching initiatives that encourage quality preparation. These challenge grants:

- Provide incentives to design and expand teacher education programs that reflect the features of effective programs. These programs should especially focus on support for new, extended (integrated four-and-a-half to five-year) models. They should provide entering teachers with a strong grounding in their content areas and a thorough preparation program that integrates subject matter and pedagogy, reflects student learning standards and up-to-date teaching methods, and takes into account diverse students' needs. Such programs, which could include pathways that begin in community colleges as well as colleges and universities, should include intensive course work in language acquisition, literacy development, learning and learning differences, curriculum, assessment, and uses of technology along with a year of wellsupervised clinical training under the guidance of expert teachers in sites where state-of-the-art practice is modeled. Clinical work should be closely linked to course work on how learners with different needs can be taught challenging content.
- Support school-university professional development partnerships that
 provide high-quality student teaching placements and the development
 of state-of-the-art practice in settings focused on student and teacher
 learning. These partnerships should be funded in high-need districts so
 that new teachers are prepared to teach effectively where they are most
 needed. Hiring National Board Certified teachers to coach beginners in
 these schools should be encouraged.
- Ensure that state funds for teacher preparation programs reflect changes in enrollments and are used to expand and improve these programs.

Funds to colleges should be allocated on the basis of enrollments and need so that programs can expand while maintaining quality and can encourage expansion in high-need fields.

6

Build a statewide infrastructure for careerlong professional development that supports educator learning and school improvement.

Pre-service teacher education is only the first milestone along the path of teacher development. A teaching credential is simply a license to begin. An accomplished workforce of teachers and leaders requires a career-long continuum of support that addresses the critical first years of practice and provides ongoing professional development. Only a small percentage of California's teachers have regular access to high-quality professional development that extends into their classroom work.

While the state has launched a number of high-quality professional development initiatives—such as the Beginning Teacher Support and Assessment (BTSA) Program and the California Subject Matter Projects—issues of scale and coordination need to be solved before these programs can benefit most of California's teachers and administrators. Both BTSA and the Subject Matter Projects provide a strong foundation; however, expansion raises a new set of challenges. Among these concerns are the following:

- The limited size and scope of some high-quality programs and the need to ensure that others maintain quality without being diluted as they are scaled up.
- The fragmentation that numerous categorical programs create.
- The failure of one-size-fits-all programs to meet the needs of teachers across grade levels, content areas, and stages of career development.
- The lack of stability in state programs that undermines quality.
- Approved lists of providers that limit choices and do not always allow for the highest quality offerings.
- The need for greater emphasis on school-based coaching and planning.

BTSA was established to help new teachers make a successful transition to the classroom. In 1988-1992, the initial pilot project, called the New Teacher Project, provided individualized support to more than 3,000 beginning teachers. Retention rates were 91 percent after the first year and 87 percent after the second year, much higher than those in California districts without such support. Now the program has grown considerably. The 2001-02 budget calls for \$84.6 million in funding to serve approximately 22,320 new teachers. Although intended to serve all new teachers with preliminary credentials, the program does not yet have that scope. Implementation challenges, local matching funding requirements, and the pressure to use

BTSA support for noncredentialed teachers have complicated matters. Regional clusters intended to support BTSA programs and help with some of these issues are themselves underresourced, but they provide an avenue to strengthen implementation.

An especially urgent need is to connect BTSA and the state's Peer Assistance and Review (PAR) program launched in 1999 to support coaching for all teachers, especially experienced teachers who need improvement. Together these programs could create a powerful resource for professional learning. However, if they are not coordinated, the two programs can strain districts' limited mentoring resources and create divergent standards and strategies for supporting teaching.

To provide ongoing professional development, California has recently made large investments in the Subject Matter Projects administered by the University of California, Office of the President (UCOP). The budget is \$35 million in 2001-02 for 129 sites. The Professional Development Institutes, begun in 1999 with the Reading Professional Development Institute, represent an even larger investment in intensive training in key subjects, with priority on serving teachers in low-performing schools. With almost \$99 million in the 2001-02 budget for these institutes in seven areas, UCOP's goal is to serve more than 70,000 teachers, one-quarter of the teacher workforce, through these two programs. Inevitably, with so many new institutes, not all of them are equally successful. It is also inevitable that some teachers will find the Institutes' offerings suited to their learning needs, but others will find them less useful to their content and students or their own stages of professional learning.

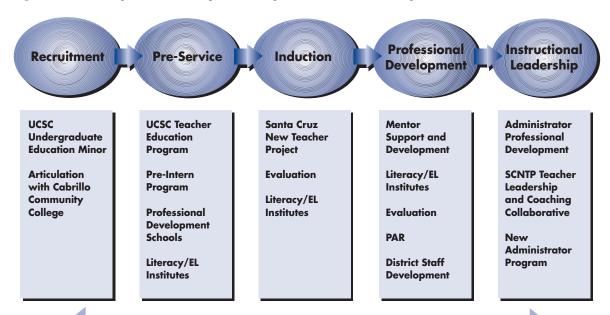
While helpful, the many efforts to address teacher and administrator learning needs have created a panoply of different visions and funding streams. Although each initiative has good intentions, this categorical approach has a drawback. Individual programs take on their own lives, creating staff positions, requirements, and practices. As these categorical programs multiply and expand, they can become more entrenched, causing a "hardening of the categoricals." The critical challenge locally is to bring these efforts together into a coherent program. Students learn more when the school staff work together with a common focus to meet their students' needs. 37

Figure 5 shows how Pajaro Valley Unified School District has developed an integrated support system that originates in recruitment and extends to leadership development. This approach strengthens the avenues for teacher

leadership and connects teacher and administrator learning. In partnership with the University of California at Santa Cruz, Cabrillo Community College, and the New Teacher Center, the district has developed specific support programs at each step in the continuum. Professional standards, coaching, and a commitment to collegial reflection and inquiry provide a common philosophy that links the different stages. California needs to create this kind of supportive continuum in every district.

School-based learning—including regular, job-embedded, collaborative professional learning focused on immediate problems of practice—is also essential. Currently, funding for school-based professional development is

Figure 5. A comprehensive system of professional development



Inquiry, Formative Assessment, Coaching, Analyzing Student Work, Professional Standards (CSTP and PVUSD Administrator Standards)

Source: Pajaro Valley Unified School District

Key: CSTP: The California Standards for the Teaching Profession

EL: English learner

PAR: Peer Assistance and Review

PVUSD: Pajaro Valley Unified School District SCNTP: Santa Cruz New Teacher Project UCSC: University of California, Santa Cruz limited. Senate Bill 1882, which launched the Subject Matter Projects in 1988, included other strands to support school planning and regional networks. The California Professional Development Consortia (PDC) established under Senate Bill 1882 still exist, but with limited funding (\$4 million). The PDC have collaborated with the California Department of Education to produce *Designs for Learning*, a guide to plan high-quality professional development, but they have limited capacity to help districts and schools use these materials. *Designs for Learning* describes a vision of school-based learning that should be reinforced in every school and district.

The Immediate Intervention/Underperforming Schools Program (II/USP) is another potential funding source for school-based professional development. Federal Title I Schoolwide Programs and Comprehensive School Reform Demonstration (CSRD) models are other important sources of school-focused funding. Title I places a major priority on breaking down the barriers between small categorical programs and creating comprehensive, schoolwide plans for improvement by coordinating existing resources. This approach often means reallocating resources and sometimes obtaining waivers from specific requirements.

Flexibility is needed, along with stability and guidance, for schools and districts to bring resources together into a coherent package.

Funding is not certain from year to year. You get entitlements, but the funds come late, you're not sure when you'll receive them, and then there's a short time frame in which funds must be expended for a specific purpose. Getting it in November and having to spend it by March is ridiculous. It's not the availability of money. It's how it becomes available, how and when it must be expended, and its variability from year to year. Also, the money does not carry over, so if it's not used, it's lost. It's very difficult to say that over the next 18 months we'll have x dollars. This uncertainty about funding makes it difficult to plan and maintain a focus over time.

—Principal, Focus Group

Assembly Bill 615 (2000) allows 75 districts to pool funds over five years from 25 state-funded categorical programs related to school and district improvement, staff development, and alternative and compensatory education. This legislation makes it easier for districts and schools to target resources toward a focused improvement strategy instead of having discrete pots of money intended for specific purposes that must be used on short timelines. However, districts and schools will need assistance to take advantage of this option.

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Support development of a statewide infrastructure for highquality professional development that includes (a) intensive content-based learning opportunities; (b) on-site coaching and mentoring; (c) time for collaboration and planning; and (d) technology supports for learning at all times and locations.

A comprehensive and coordinated system of support for career development is needed. First, intensive content-based opportunities, such as the Subject Matter Projects, are often provided outside the school setting, allowing in-depth understanding of content and new teaching methods. Second, this external assistance must be complemented by assistance at the school—often through coaching—where teachers can apply and develop new practices. Third, time for teachers to work together is essential. Finally, technology is a key tool to increase access and support (see Fig. 6).

Coaching and Support for Teacher Leaders

Focus on Student Learning

Intensive Content-based Professional Development

Technology

Figure 6. Infrastructure for career support

Stabilize funds for intensive, content-based institutes, such as the Subject Matter Projects, the California Professional Development Institutes, and other high-quality providers. Include funds for both summer training and follow-up coaching within schools, and encourage partnership programs.

Successful professional development is continuous over time and is organized around real problems of practice that teachers confront. It is connected both to teachers' work with children and to their specific content fields. In addition, opportunities for peer coaching, modeling, observation, and feedback help teachers learn to apply new ideas, especially when these ideas are integrated into the school's planning around curriculum, instruction, and assessment. Funding for summer institutes should take into account this need for coaching to be continued into the classroom throughout the school year. Effective follow-up to the institutes will be more likely if programs are planned as partnerships between districts, universities, and others. The Subject Matter Projects may be able to help by providing opportunities for advanced learning and development of teacher leadership, including training coaches.

Provide flexible funding and examples of how districts can combine funding sources to create a coherent approach to professional development for improving student learning. Replace program compliance with accountability for student results.

The challenge for school-based professional development is to coordinate external assistance and local control. Schools need access to assistance outside the building, but they also need to take hold of these resources, accept responsibility as a community for supporting continuous learning, and construct their own programs. A balance must be struck between external requirements that guide or support and internal capacity to make locally appropriate decisions.

Schools need stable, reliable, and flexible funding if they are to accomplish their goals. Principals need to know what funds will be available over longer periods of time (e.g., 18 months to three years) so that they can schedule expenditures and focus on professional development.

Assist schools and districts in developing and implementing professional development plans that incorporate features of effective school-based professional development, such as those articulated in *Designs for Learning*.

The PDC support implementing high-quality professional development programs using tools such as *Designs for Learning*. Established in 1988 as part of Senate Bill 1882, the PDC are a key resource for building local capacity, and their funding should be increased.

Designs for Learning	
Design elements for high-quality professional development	Less effective practices
1. Student Data. Uses student performance and achievement data, including student feedback, teacher observation, analysis of student work and test scores, as part of the process for individual and organizational learning.	There are few opportunities to collectively analyze student work or other data. Schools receive no technical assistance in using and understanding data. Someone outside of the school makes decisions about teachers' professional development needs.
2. Planning. Uses a coherent long-term professional development planning process, connected to the school plan, which reflects both site-based priorities and individual learning needs.	There are multiple school plans and planning processes. Teachers' professional development is not related to long-range learning goals but is based on perceived needs, demands, or opportunities.
3. Time. Provides time for professional learning to occur in a meaningful manner.	Professional development takes place on teachers' own time. Other than three to five district-wide days, teachers' professional time is limited to brief logistical meetings before, during, or after school.
4. Leadership. Respects and encourages the leadership development of teachers.	Few rewards or incentives demonstrate to teachers that the district or school values their leadership. Leadership roles are an add-on to full-time teaching responsibilities. Taking a leadership role may mean "breaking rank"; expertise is outside of the classroom.
5. Content and Pedagogy. Develops, refines, and expands teachers' pedagogical repertoire, content knowledge, and the skill to integrate both.	Teacher in-service is limited to training presentations by outside experts and focuses on topics those experts choose. Professional development in the content area changes yearly. No system for coaching and peer collaboration about classroom practice exists. Teachers observing one another is valued, but no resources or support are provided.
Inquiry. Provides for and promotes continuous inquiry and reflection.	Professional development is episodic and not sustained over time. Inquiry, whether it is action research or data collection and analysis, is considered a private matter. Inquiry is not built into any regular process at the school.

Designs for Learning (Continued)

Design elements for high-quality professional development	Less effective practices
 Collaboration. Provides for collaboration and collegial work, balanced with opportunities for individual learning. 	Teaching is still viewed as an isolated activity. Teachers have to defend their time working together to the school administration, the community, and policymakers. When they do have time to develop a vision and goals, staff may not have time to integrate these goals into teaching practice or to address possible conflict, biases, or assumptions that may negatively affect student learning.
8. Adult Learning. Follows the principles of good teaching and learning, including providing comfortable, respectful environments conducive to adult learning.	Professional development is organized without staff input and according to a single learning model. Often, the intended outcomes are unclear. Teachers and administrators are expected to apply the material presented without examples or follow-up support. The settings are uncomfortable for adults.
9. Support. Creates broad-based support of professional development from all sectors of the organization and community through reciprocal processes for providing information and soliciting feedback.	The community is not informed about the professional development goals or involved in planning. Sessions are held with one or two days notice. Stakeholders are notified, but no other contact is made.
10. Accountability. Builds in accountability practices and evaluation of professional development programs to provide a foundation for future planning.	Professional development is evaluated on teacher satisfaction instead of its impact upon student achievement. Professional development resources are allocated based on policy priorities or state testing with little formal evaluation or local input.

Develop coaching for both beginning and veteran teachers. Provide common training for mentors, cooperating teachers, and university and school supervisors based on the California Standards for the Teaching Profession (CSTP) and documentation of successful coaching models. Fund regional centers to support districts by training mentors, coaches, assessors, and support providers.

PAR and BTSA have distinct governance and programmatic characteristics, but they share a common purpose in mentoring and support. It is especially urgent to connect the two programs. Districts need models of good coaching and examples of how the two can best be built on common standards and be coordinated.

The statewide infrastructure of support for BTSA includes several elements that could be strengthened and coordinated. The New Teacher Center, for example, could be supported to develop a model for training coaches and mentors statewide.

It is also a priority to organize and augment regional services. Since the current six statewide BTSA clusters are not sufficiently funded to support the needs of all the programs in their service area, they could be expanded to 11 to match other regional statewide structures. In addition, these 11 BTSA regional programs could be aligned to the 11 regional Professional Development Consortia, the 11 regional California Technology Assistance Program (CTAP) projects, and other regional programs, such as the federal Statewide System of School Support (S4). These regional alliances should be sufficiently funded to help design and implement coordinated programs. This design work is even more important as PAR and BTSA are coordinated and other fiscal planning needs arise, including the integration of technology.

Fund the development of a Web-based support system for teachers and administrators that is available at all times and includes standards-based curriculum resources, professional development resources, and facilitated online training.

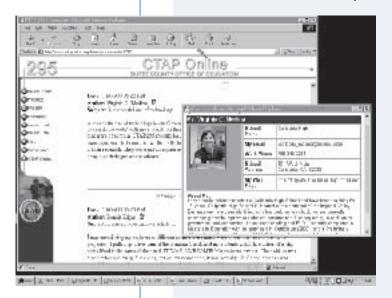
Technology is a key resource for ongoing professional development. Learning by having access to information—and to colleagues—anywhere, anytime through technology can be a vital support. The California Department of Education has an important role to play in providing Web-based information that educators need as they implement standards. Working with other agencies and following the best standards for online media, CDE can create an archive of resources and tools for curriculum planning, lesson design, and student assessment that can help teachers learn how to teach the California academic standards. This database can be made interactive so that it can be personalized for each teacher. Accomplished teachers could then archive lessons for access by others.

Most important, technology experts caution that "high tech" must be combined with "high touch." Information alone is not enough; people need both the craft knowledge and the motivation gained by direct interaction. Technology can enhance both information exchange and interaction. The California Technical Assistance Project (see accompanying box) is one state-funded program that is making impressive inroads in this area, but more is needed. For example, BTSA could be supported by a Web site that facilitates interaction between beginning teachers and their support providers, including a flexible, interactive, and online version of the BTSA assessment process.

High Tech Plus High Touch: Using Internet-Based Technology to Support Professional Development

Teachers across the state are helping each other design standardsbased units through a course developed by the California Technical Assistance Project at the Butte County Office of Education. This innovative program is one example of how technology can both provide information and connect people to each other.

The CTAP Online course begins with a 40-hour summer institute when people meet face-to-face. Because the institute materials are online, however, the seven CTAP Online staff can train 100 California teacher leaders so that each can then deliver the course to 25 teachers locally, for a total of 2,500 teachers served.



In addition to the summer institute, teachers participate in 80 hours of extended learning over the school year—and beyond—as they turn to each other for ideas and assistance. Gaps show up as students need additional resources or activities; again, colleagues can help. In fact, one feature of the site, a database of teacher-submitted Web resources, is growing rapidly as teacher participants identify sites aligned with their standards-based lessons.

All this online communication has a personal touch. Teachers not only know some of their correspondents from the summer institutes, but can become acquainted with new colleagues as well. One of the most popular features of the site is a set of biographies with photographs because teachers "want to see who they're talking to."

7

Ensure that high-quality professional development reaches teachers and administrators in high-need communities.

To reach the goal of quality teaching for each child, we must pay special attention to those circumstances where the need is the greatest. Schools that serve high-poverty communities, schools with larger proportions of English learners, and schools with lower achievement scores have higher proportions of uncredentialed teachers. This inequitable distribution of credentialed teachers strongly contributes to the achievement gap. Reversing this situation and recruiting capable teachers and school leaders to these sites (see Recommendations 3 and 4) must be coupled with skill development initiatives targeted to high-need communities. In fact, it is only when staffing is stabilized that skill development can be most effective. Intense and ongoing skill development activities can then help teachers and school leaders learn what it takes to succeed in these settings.

The urgent needs of low-performing schools have led California policy-makers to target resources to them. The Governor's Professional Development Institutes, the largest current teacher training initiative, specifically target teams from schools at or below the 49th percentile on the Academic Performance Index and schools with a high number of beginning or underqualified teachers; 75 percent of the slots for the Subject Matter Projects are for such schools. Resources targeted to low-performing schools also offer important opportunities for school-based professional development. II/USP schools receive assistance from an external evaluator to develop an action plan. Funds to implement that plan over the following two years can support teacher collaboration time and continued external assistance.

While low-performing schools deserve more urgent attention, it is important not to see their situations as a quick fix, especially when it comes to skill development. Research on school reform, especially in low-performing schools,³⁸ demonstrates that it takes five or more years to reverse long-standing conditions and create sustainable capacity to reach higher levels of student achievement. Identified low-performing schools may need first to develop basic conditions of readiness.³⁹ Schools that begin to make progress are sometimes penalized for their success by losing the resources that they need to continue to achieve. Programs targeted to high-need communities and sustained over time can anchor a system that prevents the extreme dysfunctionality of some low-performing schools and helps all schools achieve at higher levels.

Actions Needed

Provide incentives for collaboration between K-12 and higher education to develop stronger preparation programs in highneed communities (e.g., support for professional development schools in high-need communities and targeted expansion of the Comprehensive Teacher Education Institutes grants).

Partnerships between higher education, school districts, and schools are a promising approach with long-term payoff. Research repeatedly shows the importance of linking theory with practice and providing course work matched with field experiences and student teaching placements. As a result, the recent CSU directives regarding budget additions, for example, include coordinating K–12 collaborative partnerships with schools, districts, and subject matter departments. Such collaboration is easier to call for than to put into place, but done well, K–18 collaboration can undergird a coherent, career-long approach to educator development. Lessons can be learned from a little-known California program—the Comprehensive Teacher Education Institutes (CTEI)—now completing its fourth phase of funding.⁴⁰

Riverside Partnership

The CTEI at the University of California-Riverside (UCR) has developed a model for training preprofessionals through six professional development schools in surrounding school districts. At these schools, clusters of six to eight students learn the teaching profession by observing and interacting with experienced teachers and administrators for the entire school year while being guided by a university supervisor who is housed at the site. These students have twice the exposure to site-based situations than student teachers in conventional teacher preparation programs.

In its newest funding cycle, this CTEI grant will also support collaboration with Riverside Community College, ensuring articulation with UCR and supporting students as they complete the five-year blended program. Student teachers at two of the professional development high schools will also tutor, mentor, and advise AVID as a way of recruiting these students into teaching.

Support ongoing, school-based professional development for schools in high-need communities. Make full use of technology.

Although recent investments, such as the Professional Development Institutes, partially address this need for high-quality professional development, California teachers in schools in high-poverty communities are less likely than their peers to participate in these programs. ⁴¹ As programs such as the state's II/USP interventions or the federal Title I initiative continue to be implemented, CDE should make professional development a key requirement and ensure adherence to quality standards.

A priority should be placed on ensuring access to technology to support professional development in high-need communities and studying what it takes to make technology resources useful. The federally funded Regional Technology and Education Consortium, which has a special focus on low-performing schools, should be tapped for assistance.

8

Improve the preparation, induction, and ongoing support of school leaders so that they are able to lead schools that successfully support student learning.

It has become clear that without excellent leaders, we will not have excellent education institutions. . . . What is needed is a redefinition of effective education leadership and a redesign of how we prepare and develop education leaders. . . . The place to start creating a new generation of education leaders is in the recruitment of able people into top-quality training programs. To attract such people, we need more competitive salaries and career benefits and change in terms and conditions of practice.

—Education Commission of the States, *Leadership for Results* (2000)

Today's school leaders must not only manage buildings and keep schools running, but also be knowledgeable and skillful instructional leaders, organizational re-designers, data analysts, financial magicians and fundraisers, and community leaders. The greater pressures brought on by the increasing demands and complexity of schools in a high-stakes accountability environment have not been accompanied by increased salaries or major reforms of professional training and support. The result is a looming shortage of people willing and able to take on the critical mission of school administration.

All signs point to an increasing administrator shortage. A 1998 survey found that half of all school districts nationwide reported shortages of qualified principals; in California, the situation is worse. A current administrators are retiring, enrollments are growing. Between 1996 and 2000, nearly 600 new California schools opened. Meanwhile, a discrepancy exists between the number of individuals who prepare for administration and the much smaller number who apply for positions. A 1999 survey of alumni from California State University at Northridge, for example, found that only 38 percent of Tier I administration program graduates were actually serving in administrative positions. The others cited low pay, high stress, limited job satisfaction, and politics as the reasons they had chosen not to pursue administrative positions. An ACSA survey in the same year reported that 98 percent of California superintendents believed there was a shortage of qualified principals; 28 percent reported that the preparation of

recent candidates for principal positions was inadequate, while only 7 percent reported that preparation was excellent.⁴⁴

Three major issues consistently emerge from national and local studies:

- The principal's job has become so complex and difficult that many feel it is no longer possible to do it well;
- The compensation level does not adequately reflect the time, responsibility, and stress involved in the job; and
- Preparation and professional development programs do not adequately address the knowledge and skills needed to succeed.

Principals need supportive conditions and a less punitive environment for schools, and their job is likely to become more attractive if they feel they are prepared to do it well. Part of the answer to this concern is in redefining the principal's role together with rethinking how leadership is organized at the school. (See Recommendation 9.)

Another major part of the answer is to define contemporary standards that can guide preparation, induction, and professional development programs and serve as the basis for certification and performance evaluation. The California Task Force on Administrative Standards recently drafted administrator standards based on national standards and tailored to California. These standards extend the traditional roles of school leaders, such as stewardship for a school's educational vision and management of its operations, to new terrain—the development of strong instructional programs for students and professional development opportunities for teachers, the use of data to analyze student learning and to rethink curriculum, the mobilization of parent and community resources, and the redesign of schools to better serve all students' needs.

The CCTC is now considering adoption of administrator standards and reviewing administrative credential requirements. Currently, the two-tiered system requires 24 to 30 semester credits for a Preliminary Credential that allows individuals to enter administration (Tier 1); then candidates must complete 24 additional credits, including mentoring and two years of experience, to gain a clear credential (Tier 2). Nevertheless, the high-quality induction envisioned by this system has yet to materialize in many districts. California needs to determine the best ways to support new administrators, balancing work requirements with continued professional development and induction support.

We should explore alternatives to the Tier 2 credential or eliminate it entirely. We need our own individual educational plans, and they

need to be appropriate and targeted. The most useful experiences involve dialoguing with peers.

Having mentor principals in the district really helps because they can give you a lot of good ideas. Regional focus groups convened by the California School Leadership Academy really help.

—Principal, Focus Group

Actions Neded

Develop and fund a comprehensive set of recruitment, preparation, career development, and workplace incentives that addresses the critical shortage of school leaders.

California needs more competitive salaries and more supported pathways into leadership roles to make the administrator job better supported and more doable and to strengthen preparation, mentoring, and ongoing support.

Build on the work of the California Task Force on Administrative Standards to establish leadership development standards that are aligned with student and teacher standards and that ensure knowledge of teaching, learning, and how to manage a collegial environment.

Standards should guide leadership development, and the administrative standards recently developed in California provide an important starting point to build broad agreement on what leaders should know and be able to do. As the CCTC reviews these standards and current requirements, attention should be paid to alignment with the student and teacher standards, so that they all reinforce a common vision, and to the skills leaders need to foster schools focused on improving student learning. Specific skills include knowledge of good teaching and effective curriculum strategies, data analysis, ability to analyze student work and ask the right questions, and skill at community engagement. Creating a professional learning community and developing teachers' capacity for improved practice are fundamental.

Align credentialing, preparation programs, and support systems with leadership standards. Provide incentives to universities and schools to develop programs for site leadership development that meet leadership standards.

Identifying standards is only the beginning. The state system of credentialing and program review must implement and reinforce the standards. Local leadership preparation and development programs must review and use the

standards in designing and assessing their programs. Incentives are needed to encourage institutions to undertake this work in a thorough way. Seeded by state funds, the new Principal Leadership Institutes for aspiring school leaders at UC Berkeley and UCLA should become part of a broader programmatic approach that inspires the creation of other new models and the redesign of existing programs.

Support collaboration between K-12 systems, universities, and other education organizations to provide field-based apprenticeships, coaching, and mentoring, including new administrator induction programs similar to the Beginning Teacher Support and Assessment (BTSA) program.

One critical point on the continuum of administrator development is the induction period. A mentoring and support program for new principals, similar to the BTSA program, would ease this transition. Integrated work on recruitment, preparation, and induction conducted by UC Santa Cruz in collaboration with the Pajaro Valley Unified School District is an example. Programs that involve a partnership between a university, a school district, and other support providers allow for a coordinated and field-based approach to preparation and mentoring. This collaborative work benefits from the flexible funds available from CTEI grants. Expansion of the CTEI program could enable more programs to be launched that support better linkages between universities and districts.

Provide incentives to school districts to develop district/ university partnership "grow your own" leadership preparation programs for high-need communities.

A promising strategy to build a cadre of administrator and teacher leaders, especially in high-need communities, is to draw on existing human resources. Just as teacher quality benefits from recruiting paraprofessionals within the community and increasing their access to preparation programs, pathways into leadership preparation are necessary. "Grow your own" programs have already been launched in several California districts that identify leadership talent among teachers and other professional staff and recruit and mentor them for future administrative roles.

Create

the Conditions That Allow Teachers and School Leaders to Succeed

9

Reconfigure site leadership to enable the principal to serve as an instructional leader and to support the development of teacher leaders who can coach and mentor others.

The entire system of recruiting, preparing, and sustaining quality leadership in the education system must be overhauled if we are to develop our capacity to help all children learn.

—Education Commission of the States, *Leadership for Results*, 2000

So much of my time is as a technician, which anyone can do. Give me someone who can do administrative support so that I can manage and be a leader. We need a business person who can handle things that take away from instructional leadership.

—Principal, Focus Group

The school principal is asked to be an instructional leader while also attending to plant management, bus schedules, legal requirements, community relations, and staff supervision. The layering on of additional categorical programs and state requirements adds to the burden. Meanwhile, California administrators are responsible for more students than any other state except Utah and for more teachers than all but a handful of states. And school size is getting larger for many; some schools are expected to grow between 33 to 50 percent over the next several years. The job is overwhelming; no one person can do it all. At the same time, legislated caps on nonteaching time constrain the development of teacher leadership that would enable more focus on curriculum design and articulation, teacher supervision and support, analysis of student learning, and instructional reform.

To deal with these challenges, administrators need new organizational models and distributed leadership. One model uses the business concept of a chief operating officer, freeing the site administrator to focus more fully on instructional leadership, the number one wish of California principals.⁴⁶

Teacher leaders are a key resource in a distributed leadership model. For example, they serve as coaches and cooperating teachers in preparation programs, take leadership roles in school-site professional development, or facilitate study groups. When teachers take on these roles, they increase their own skills and help others to do so.

All principals need to be instructional leaders. Teachers teaching teachers and curriculum coaches on half-time assignments aid us in this effort.

-Principal, Focus Group

If teachers do not have students assigned, then their time counts as administrative time. There's a formula limiting the number of administrators at the high school level that makes it hard for me to use teachers as leaders on site or to "distribute" my leadership to teachers.

—Principal, Focus Group

California has created a need for widespread instructional leadership within schools and has created some financial support for mentors and coaches through BTSA and PAR. However, California must not exhaust the pool of teacher leaders. Over 70 percent of accomplished teachers took on roles outside the classroom, such as adjunct faculty in teacher preparation programs, district staff developers, or coaches for beginning teachers, according to one survey. These same teachers may have two or three new jobs. BTSA is scaling up rapidly, and PAR calls on teacher leaders. Comprehensive school reform models call for site facilitators or on-site coaches. The key is to redesign roles and staffing in new patterns, not just to shift assignments from one overworked person to another; this requires both creativity and resources.

Actions | Jeeded

Document and disseminate examples of schools that have strengthened their focus on learning and instruction by creating new leadership roles and staffing patterns. Provide funds to implement promising models.

Some schools have developed co-principalships; others have developed new roles for teacher leaders who work closely with the principal on

instructional tasks. Some have developed a "bursar" role, such as in European schools, freeing the principal from administrative logistics to focus more on teaching and learning. These strategies seek to staff the school to support the work of the organizations' leaders, requiring new arrangements for organizing work. Coaches need release time to work with teachers. Team leaders and department chairs can take on responsibilities for instructional improvement if their roles are so defined. Positions such as reform coordinator or program facilitator can be developed. Some schools fund these positions directly. Some districts create district or cluster-level positions that contribute to the leadership staffing in schools. Some districts make grants to principals to support their work, including compensating teachers for developing curriculum or taking leadership roles on projects. Models such as these need to be described, studied, and supported through incentive funding.

Time for leadership development must be a key part of these models. Administrators and teacher leaders need time for their own reflection and professional growth, not just to assist others. Often, this need will require them to leave the site for professional learning with their counterparts from other sites. Time schedules and distributed staffing patterns need to cover site responsibilities to provide professional growth time for leaders.

Provide incentives and reduce barriers for schools to create shared leadership models that enable more intensive collaboration, coaching, and mentoring focused on improved learning and instruction. Eliminate from the administrative cost formula the time allocated for teachers to assist other teachers.

Reconfigurations of time and staffing often conflict with current policies. The specific policies will vary by location, but they include those that address funding allocations, staff use of time, facilities, and personnel duties. The administrative cost formula needs to be changed so that the time teachers spend assisting their peers does not count as administration.

10

Redesign schools so that they can focus on student and teacher learning. Add and reorganize time to enable collaborative teacher planning and inquiry.

In many American schools, students move from teacher to teacher with little connection among grades or classes, teachers teach independently from one another, and coordination of teaching and learning across the organization is handled by those who do not teach. Teachers' scheduled time is spent almost entirely on instructing students, and planning and professional development are seen as something outside the school day—tacked on in late afternoons, on Saturdays, or during intersession breaks. These traditions result in a fragmented curriculum and learning experience for students and an isolated experience for teachers. These practices minimize the sharing of professional knowledge about students and subject matter and reduce the possibilities for strong relationships between adults and children.

Research on extraordinarily successful schools finds that they are designed to foster more coherent learning and powerful teaching. In addition to featuring smaller schools or within-school units (the optimal size is generally 300 to 500 students), such schools feature more personalized learning environments in which teams of teachers work together and with the same students over longer blocks of time.⁴⁸

There is a critical mass at a school that enables teachers to work together to improve their practice. For example, three to six teachers per grade level can help to support the school as a learning system. I can build a learning community with 750 students, whereas with 1,000 I can't get to them all, and I am not able to establish a connection with so many adults.

—High School Principal, Focus Group

Staffing patterns and schedules in successful schools are also structured to allow for regular interaction among teachers so that they can plan and develop an articulated curriculum. Professional development includes school-based time for teachers to collaborate with their colleagues, develop lessons, work on school improvement plans, conduct classroom-related research, participate in study groups, mentor new teachers, and observe and coach each other.

While there are cultural differences between China, Japan, and the United States, there are also clear differences in educational practices between America and these Asian countries that perform better in international comparisons of achievement. One of the most striking distinctions is the teaching schedule that enables teachers in these countries to work on demonstration lessons with one another and observe frequently in each other's classrooms:

The full realization of how little time American teachers have for interacting with other teachers became clear to us during a meeting in Beijing. We were discussing the teachers' workday. When we informed the Chinese teachers that American elementary school teachers are responsible for their classes all day long, with only an hour or less outside the classroom each day, they looked incredulous. How could any teacher be expected to do a good job when there is no time outside of class to prepare and correct lessons, work with individual children, consult with other teachers, and attend to all the matters that arise in a typical day at school! Beijing teachers teach no more than three hours a day, unless the teacher is a homeroom teacher, in which case the total is four hours. . . . The situation is similar in Japan.⁴⁹

Researchers compare the lessons jointly developed by Japanese and Chinese teachers during their regular shared planning time to "polished stones" that are finely crafted to succeed with students. In addition, teachers in Japan and China spend at least two years with their students, a practice that boosts achievement by enabling teachers to know more about how their students learn and to have more curricular time and hence to teach them more effectively.

Many California schools are seeking to redesign themselves to enable more fruitful relationships among teams of teachers and students and more opportunities to build coherent curriculum and learning experiences. Incentives for the important work of designing twenty-first century schools are necessary. Time for this redesign work and for ongoing teacher planning and development is a much-needed resource.

A major resource for finding time for teacher planning and learning is the funding allocated for staff development days. In 1998, \$246.8 million was appropriated under Senate Bill 1193, Instructional Time and Staff Development Reform, to purchase up to three days of time per year for staff development outside the 180-day school year. This program replaced the previous provision for eight days of staff development each year. Unfortunately, this approach tends to encourage low-quality professional development practices, such as one-time workshops. Other than district-mandated

sessions, teachers' professional time may be limited to brief meetings to discuss announcements, schedules, and logistics. Teachers who want more collaborative work time or more focused professional development must do so on their own time. Although some schools and districts have creatively responded to Senate Bill 1193, the legislation itself does not encourage such creativity.

When schools had eight days of professional development time, it was possible to do whole school retreats focused on specific curricular areas. Teachers found these useful.

Nothing in the system helps teachers to get together to craft their professional work, then go back and learn and re-craft so they may do a better job with kids. Other professions have this opportunity.

-Principal, Focus Group

Acti ns Nee led

Add ten days of state-funded professional development time that can be used flexibly to extend the contract year for teachers (e.g., longer year, longer day).

To create professional learning communities in schools that can substantially improve student learning, administrators find **time** is the most important resource. Schools need both the resources and the flexibility to build that time into the schedule in different ways. They need to be able to consider time and staffing together and adapt to the constraints of different school schedules, including year-round calendars.

The cost of adding more time is significant but within reach. Approximately \$850 million would be required to purchase ten days of professional development time annually for all California teachers. Although increasing instructional time for students is important, it is much more expensive to increase the school year for students, and the quality of teaching and how students spend their time are even more important. For example, the research on Asian countries also shows that those students are engaged in more complex tasks, and a greater percentage of their time is focused on academic learning. Allocating more time for student learning without integrating time for teacher learning will not necessarily lead to better results. And it costs substantially more.

Provide districts with information, technical assistance, and the flexibility to redesign schools and to support time for collaborative teacher planning, coaching, and learning.

California should also create incentives to create smaller schools and school units that are designed to support teaching and learning—much like the recently enacted federal Small Schools Act—giving priority to hard-to-staff districts that have growing enrollments and overcrowding. The school designs should be based on proven models featuring stronger, longer-term teacher-student relationships; teacher collaboration in developing coherent curriculum and in planning and conducting instruction; and arrangements for embedded professional development.

Redesign of schools can also be accomplished, in part, through existing resources by using different staffing patterns and reallocating resources. This possibility is especially true when schools have federal resources, such as Title I funds. Schools have successfully used these strategies, including having students engage in art, music, community service, or other learning opportunities while core teachers collaborate; rearranging the schedule through banking time and early dismissal; providing common preparation or planning time to teams of teachers; instituting formal team teaching, block scheduling, or the addition of extra periods during the school day; and hiring specialists, coaches, part-time staff, or regular substitutes who can take teaching rotations. One core strategy should be to communicate successful fiscal models to schools and districts and provide assistance to districts in analyzing options and designing new schedules that fit local circumstances. The California Department of Education should establish a clearinghouse of information about different scheduling options and fiscal strategies.

Conclusion

The vision that underlies these recommendations is a comprehensive system of educator development that attracts people into education and supports them in becoming accomplished professionals. Only through this strengthened workforce of teachers and leaders can California's children achieve to the level that society demands.

Transforming an array of policies and practices into an increasingly coherent system will take time. While policymakers must take immediate action on priority issues, their actions must be part of a long-term strategy. Evaluation and refinement of existing policies, together with bold progress in new areas, will be needed.

The Action Plan Matrix in Appendix B is a tool for planning immediate action. For each recommendation, a column on "building blocks" identifies current programs and legislation that often represent substantial progress and serve as a foundation for further work, and a ten-year vision statement paints a picture of what success would look like.

California's children—all of them—deserve no less.



Appendix A

Recommendations

The Professional Development Task Force recommends that California take the steps necessary to . . .

Make Teaching and School Administration Attractive Careers

- 1 Increase salaries for teachers and administrators.
 - Continue to increase compensation for beginning and veteran teachers and administrators to levels that are competitive with occupations requiring similar training.
 - Create salary scales that allow for a longer professional year and compensation models that are based on knowledge and skills.
- 2 Strengthen multiple pathways into teaching and school leadership. Actively recruit high school students, college students, paraprofessionals, and mid-career entrants.
 - Expand information, resources, and incentives to introduce high school and community college students to teaching as a career and provide smooth and cost-efficient transitions into preparation for college students and mid-career entrants.
 - Communicate recent changes in equivalencies for out-of-state credential holders. Continue to expand reciprocity and enable teachers to return from the reserve pool.
 - Provide financial incentives, training grants, and accessible programs to encourage well-qualified individuals to pursue administrative careers.

3 _Enable schools that serve high-need students to attract and keep well-qualified teachers and administrators.

- Expand Cal T Grants, Assumption Program of Loans for Education (APLE) loans, and Governor's Teaching Fellowships to encourage teachers and administrators in high-need areas to teach in high-need locations. Provide stipends for student teachers to complete preparation before becoming the teacher of record.
- Expand incentives for local school districts to improve working conditions in schools that serve high-need students (e.g., smaller schools and classes, teaching teams, time for co-planning and professional development, and high-quality mentoring).
- Provide additional incentives for National Board Certified teachers and other teacher leaders to work in and redesign schools in high-need areas, and create incentives to attract well-prepared administrators to high-need schools.

4 _Eliminate emergency permits and waivers within five years.

- Develop an action plan to eliminate emergency permits and waivers within five years. Evaluate labor market conditions and identify the resources, incentives, and supports needed to enable all districts to recruit and hire qualified teachers.
- Evaluate sources of difficulties in districts that hire large numbers of underqualified teachers and develop remedies to improve hiring outcomes. Publicly report a Teacher Qualifications Index for all schools annually.
- Provide incentives to districts for updating and streamlining hiring processes, for hiring fully qualified teachers in a timely manner, and for placing fully qualified teachers and administrators in hard-to-staff schools.
- Prohibit the disproportionate assignment of emergency-permit teachers to schools identified as lowest performing.

Provide Teachers and School Leaders with the Skills They Need to Improve Student Learning

- 5 Enhance the capacity of colleges and schools to prepare teachers well in high-need fields.
 - Expand incentives for universities, colleges, community colleges, and school partners, working in collaboration, to create and expand blended program models and post-baccalaureate models that include features shown to produce more effective teachers.
 - Ensure that state funds for teacher preparation programs reflect changes in enrollments and are used to expand and improve these programs.
- Build a statewide infrastructure for career-long professional development that supports educator learning and school improvement.
 - Support development of a statewide infrastructure for highquality professional development that includes (a) intensive content-based learning opportunities; (b) on-site coaching and mentoring; (c) time for collaboration and planning; and (d) technology supports for learning at all times and locations.
 - Stabilize funds for intensive, content-based institutes, such as the Subject Matter Projects, the California Professional Development Institutes, and other high-quality providers. Include funds for both summer training and follow-up coaching within schools, and encourage partnership programs.
 - Provide flexible funding and examples of how districts can combine funding sources to create a coherent approach to professional development for improving student learning. Replace program compliance with accountability for student results.
 - Assist schools and districts in developing and implementing professional development plans that incorporate features of effective school-based professional development, such as those articulated in *Designs for Learning*.

- Develop coaching for both beginning and veteran teachers. Provide common training for mentors, cooperating teachers, and university and school supervisors based on the California Standards for the Teaching Profession (CSTP) and documentation of successful coaching models. Fund regional centers to support districts by training mentors, coaches, assessors, and support providers.
- Fund the development of a Web-based support system for teachers and administrators that is available at all times and includes standards-based curriculum resources, professional development resources, and facilitated online training.
- 7 Ensure that high-quality professional development reaches teachers and administrators in high-need communities.
 - Provide incentives for collaboration between K–12 and higher education to develop stronger preparation programs in highneed communities (e.g., support for professional development schools in high-need communities and targeted expansion of the Comprehensive Teacher Education Institutes grants).
 - Support ongoing, school-based professional development for schools in high-need communities. Make full use of technology.
- 8 —Improve the preparation, induction, and ongoing support of school leaders so that they are able to lead schools that successfully support student learning.
 - Develop and fund a comprehensive set of recruitment, preparation, career development, and workplace incentives that addresses the critical shortage of school leaders.
 - Build on the work of the California Task Force on Administrative Standards to establish leadership development standards that are aligned with student and teacher standards and that ensure knowledge of teaching, learning, and how to manage a collegial environment.
 - Align credentialing, preparation programs, and support systems with leadership standards. Provide incentives to universities and schools to develop programs for site leadership development that meet leadership standards.

- Support collaboration between K–12 systems, universities, and other education organizations to provide field-based apprentice-ships, coaching, and mentoring, including new administrator induction programs similar to the Beginning Teacher Support and Assessment (BTSA) program.
- Provide incentives to school districts to develop district/university partnership "grow your own" leadership preparation programs for high-need communities.

Create the Conditions That Allow Teachers and School Leaders to Succeed

- 9 Reconfigure site leadership to enable the principal to serve as an instructional leader and to support the development of teacher leaders who can coach and mentor others.
 - Document and disseminate examples of schools that have strengthened their focus on learning and instruction by creating new leadership roles and staffing patterns. Provide funds to implement promising models.
 - Provide incentives and reduce barriers for schools to create shared leadership models that enable more intensive collaboration, coaching, and mentoring focused on improved learning and instruction. Eliminate from the administrative cost formula the time allocated for teachers to assist other teachers.
- Redesign schools so that they can focus on student and teacher learning. Add and reorganize time to enable collaborative teacher planning and inquiry.
 - Add ten days of state-funded professional development time that can be used flexibly to extend the contract year for teachers (e.g., longer year, longer day).
 - Provide districts with information, technical assistance, and the flexibility to redesign schools and to support time for collaborative teacher planning, coaching, and learning.

Appendix B

Strategic Plan of Action

Make teaching and school administration attractive careers.

Recommendation 1. Increase salaries for teachers and administrators.

Actions	Building Blocks	Next Steps	Ten-Year Vision
Continue to increase compensation for beginning and veteran teachers and administrators to levels that are competitive with occupations requiring similar training.	Senate Bill (SB) 1643 (2000) Funds districts to increase beginning teacher salaries to \$34,000. Assembly Bill (AB) 2879 (2000) Provides tax credits for teachers. Extra Credit Teacher's Home Purchase Assistance Program Provides the California Housing Finance Agency with funds to provide affordable loans and downpayment assistance to teachers and principals. Designed to help low-performing schools attract and retain staff.	(Reader to fill in next steps to accomplish vision.)	Teacher and administrator salaries increase to levels equivalent to those of others with comparable education for an 11-month professional year. State funds are pooled and supplemented to fund a substantial salary increase that is equalized across districts with adjustments for cost of living and educational challenges.
Create salary scales that allow for a longer professional year and compensation models that are based on knowledge and skills.	Teachers as a Priority (TAP), SB 1666 (2000) Provides competitive block grants to districts in the lower half of the Academic Performance Index (API) for incentives to hire credentialed teachers, including signing bonuses, housing subsidies, and increased pay. Instructional Time and Staff Development Reform, SB 1193 (1998) Pays teachers and classified staff for three days of staff development time. National Board Certification Incentive Program, SB 1666 (2000) Provides funds for achieving National Board Certification and additional monies for those who teach in a low- performing school for four years. Beginning Teacher Support and Assessment (BTSA), SB 2042 (1998) Provides discre- tionary funds to pay teachers additional stipends for providing support to beginning teachers. Peer Assistance and Review (PAR), AB 1X (1999) Provides funds to support mentoring and coaching of teachers.		Teachers can work an 11-month year that includes significant time for collaborative curriculum work and professional development both during intensive periods and throughout the year. Districts adopt salary scales based on knowledge, skills, and performance. Key milestones on the salary scale include gaining the professional credential, taking on mentoring and other teacher leadership roles, and achieving National Board Certification.

Recommendation 2. Strengthen multiple pathways into teaching and school leadership. Actively recruit high school students, college students, paraprofessionals, and mid-career entrants.

Actions	Building Blocks	Next Steps	Ten-Year Vision
Expand information, resources, and incentives to introduce high school and community college students to teaching as a career and provide smooth and cost-efficient transitions into preparation for college students and mid-career entrants.	CalTeach, AB 1740 (2000) Funds CalTeach to maintain a comprehensive Web site and toll-free phone system for job posting and other information about becoming a teacher. Also provides funds to develop and deliver a marketing campaign to improve public perception about teaching as a profession. Teacher Recruitment Initiative Program, SB 1666 (2000) Serves as a clearinghouse of information and support to enable districts and schools with a high percentage of emergency credentials to recruit teachers through six regional centers. Future Teachers of America Offers early recruitment to high school students. Community College Reading Development Partnership Program Provides community college grants to establish, consolidate, or expand teacher preparation or school tutoring/outreach programs while helping to improve elementary students' reading skills. California School Paraprofessional Teacher Training Program, AB 352 and AB 353 (1997) Provides funds to recruit paraprofessionals from the community to offer training toward certification.		With significant salary increases, improved conditions for teaching and learning, and successful marketing, the public views education as a worthwhile career. High school students have an opportunity through career pathway programs and tutoring of younger students to discover their interest in the profession. Articulation agreements between community colleges and four-year colleges and universities allow for smooth completion of subject matter programs and full transfer of education courses and credits. Blended programs of study for undergraduate entry into teacher education pathways are commonplace in California colleges and universities. Postgraduate programs that support mid-career entry are readily available and offered in the evenings and on weekends.
Communicate recent changes in equivalencies for out-of-state credential holders. Continue to expand reciprocity and enable teachers to return from the reserve pool.	AB 1620 (1998) and AB 877 (2000) Established comparability of teacher preparation programs for some or all credentials with those of 26 other states. If their preparation is comparable, out-of-state teachers receive a preliminary credential and five years to meet any requirements not yet met. SB 1666 (2000) Grants a clear credential to National Board Certified teachers who hold a teaching license in their state and who move to California.		Certified teachers from other states find California a welcoming state in which to teach. California has achieved full reciprocity with most other states and has waived additional requirements when equivalent or more rigorous standards have been met. Improved working conditions, higher salaries, and removal of unnecessary re-entry barriers cause many teachers to return from the state's large reserve pool.

Recommendation 2 (Continued)

Actions	Building Blocks	Next Steps	Ten-Year Vision
Provide financial incentives, training grants, and accessible programs to encourage well-qualified individuals to pursue administrative careers.	Governor's Principal Leadership Institutes (1999) Provides funds for UC Berkeley and UCLA teacher and administrator leadership training each year. New Teacher Center (NTC), AB 1740 (2000) Provides, among other programs, the New Administrators Project (NAP) in which NTC staff with site administration experience coach and train first-year principals.		Prospective administrators are identified early and supported in their leadership development. These candidates, who represent California's diversity, are funded to pursue readily available, high-quality administrator preparation.

Recommendation 3. Enable schools that serve high-need students to attract and keep well-qualified teachers and administrators.

Actions	Building Blocks	Next Steps	Ten-Year Vision
Expand Cal T Grants, APLE loans, and Governor's Teaching Fellowships to encourage teachers and administrators in high- need areas to teach in high-need locations. Provide stipends for student teachers to complete preparation before becoming the teacher of record.	APLE Expansion, SB 1666 (2000) Assumes student loans for teachers who agree to teach up to four years in a subject area with teacher shortages or in schools that serve large populations of socioeconomically disadvantaged students. CAL T Grant, SB 1666 (2000) Provides awards for prospective teachers enrolled in teacher preparation programs. California Teaching Fellowships Program, SB 1666 (2000) Provides funds for merit-based teaching fellowships for graduate students who agree to teach in a low-performing school for four years.		Any student with the skills and desire to become a teacher in a high-need subject area or a high-need location receives full support for preservice teacher preparation. Service scholarships and forgivable loans are readily available and easy to access for all individuals who commit to a term of service in California schools serving large proportions of lowincome students, English learners, or low-achieving students. Students of color are recruited, in proportions that reflect California's population, into the teaching profession through highquality, pre-service programs.
Expand incentives for local school districts to improve working conditions in schools that serve high-need students (e.g., smaller schools and classes, teaching teams, time for co-planning and professional development, and high-quality mentoring).	Teachers as a Priority (TAP), SB 1666 (2000) Provides competitive block grants to districts in the lower half of the API for incentives to hire credentialed teachers; incentives may include improving working conditions.		Schools with greater educational challenges have the resources to create positive learning environments that enable recruiting and retaining high-quality staff and achieving substantially higher performance levels for students. A focus on building and reclaiming facilities and reconfiguring large secondary schools has made it possible to create appropriately sized schools (e.g., 300 to 500 students), or schools within schools, in which adults and students learn and thrive.

Recommendation 3 (Continued)

Actions	Building Blocks	Next Steps	Ten-Year Vision
Provide additional incentives for National Board Certified teachers and other teacher leaders to work in and redesign schools in high-need areas, and create incentives to attract well-prepared administrators to high-need schools.	National Board Certification Incentive Program Provides funds for achieving National Board Certification plus additional monies for those who teach in a low-performing school for four years.		Accomplished teacher leaders and administrators are supported to take on challenging circumstances and redesign schools to be more effective.

Recommendation 4. Eliminate emergency permits and waivers within five years.

Actions	Building Blocks	Next Steps	Ten-Year Vision
Develop an action plan to eliminate emergency permits and waivers within five years. Evaluate labor market conditions and identify the resources, incentives, and supports needed to enable all districts to recruit and hire qualified teachers.	CalStateTEACH Operated by California State University (CSU), a multiple-subject credential program using the Internet, school site mentors, and supervisors to certify teachers who are working on emergency permits, most of whom are mid-career entrants. Intern Program Provides a course of study with expert teachers and higher education faculty for interns who have met subject matter requirements. Adminis- tered by the California Commis- sion on Teacher Credentialing (CCTC). Pre-Intern Programs Funds programs that offer a formalized entry into internship programs in districts and county offices.		No California student spends the majority of his or her school year with an underprepared teacher. California joins other states in eliminating emergency permits and waivers through a comprehensive set of incentives, including salary incentives that equalize district capacity to pay for well-prepared teachers, training incentives that focus on high-need teaching fields and locations, and the expansion of high-quality preparation programs.
Evaluate sources of difficulties in districts that hire large numbers of underqualified teachers and develop remedies to improve hiring outcomes. Publicly report a Teacher Qualifications Index for all schools annually.	SB 1331 (2000) Authorizes the Fiscal Crisis and Management Assistance Team (FCMAT) to audit districts for their person- nel practices when they have applied to CCTC for waivers for over 20 percent of their teaching force; the state pays FCMAT to audit, issue a report, and monitor performance. Teacher Quality Index, AB 833 (2001) Requires the Superinten- dent of Public Instruction to develop a teacher qualification index that measures the distribution of credentialed and underqualified teachers within school districts.		A publicly reported Teacher Qualifications Index encourages effective hiring practices and ensures parents and other stakeholders that teachers in their community are fully prepared.

Recommendation 4 (Continued)

Actions	Building Blocks	Next Steps	Ten-Year Vision
Provide incentives to districts for updating and streamlining hiring processes, for hiring fully qualified teachers in a timely manner, and for placing fully qualified teachers and administrators in hard-to-staff schools.	Teachers as a Priority Provides competitive block grants to districts in the lower half of the API for incentives to hire credentialed teachers and reduce the number of emergency permit teachers.		Hiring processes throughout California districts are stream- lined, with needs for transfers and job openings identified early and recruitment managed efficiently so that hiring may be done by spring rather than after school begins.
Prohibit the disproportionate assignment of emergency-permit teachers to schools identified as lowest performing.			California no longer distributes its most experienced teachers unequally. There are more teachers, they have better preparation overall, and they are assigned according to educational need. Local district contracts support these practices.

Provide teachers and school leaders with the skills they need to improve student learning.

Recommendation 5. Enhance the capacity of colleges and schools to prepare teachers well in high-need fields.

Actions	Building Blocks	Next Steps	Ten-Year Vision
Expand incentives for universities, colleges, community colleges, and school partners, working in collaboration, to create and expand blended program models and post-baccalaureate models that include features shown to produce more effective teachers.	CSU received additional funding from 1997 to 2000 to increase the number of candidates served. All CSU programs now provide a blended option, but most of these programs are small. Comprehensive Teacher Education Institutes (CTEI), (1985) Funds grant awards to institutions of higher education—school district collaboratives to improve teacher preparation and retention.		High-quality programs have been expanded to meet the need for teachers overall and in particular fields where there were insufficient program slots (e.g., special education). All interested prospective teachers are able to fund their preparation. Many new California teachers enter the profession after completing a four-and-a-half to five-year blended program. These programs—both in public and private universities and colleges—combine theory and practice, integrate content and pedagogy, and offer extended clinical practice (30 weeks or more) in a professional development school setting that serves high-need students.
Ensure that state funds for teacher preparation programs reflect changes in enrollments and are used to expand and improve these programs.	SB 2042 Authorizes the development of new standards for program quality and effectiveness and Teaching Performance Expectations for teacher preparation programs. CCTC approved these new standards in September 2001.		Funds are allocated to colleges based on enrollment and need.

Recommendation 6. Build a statewide infrastructure for career-long professional development that supports educator learning and school improvement.

Actions	Building Blocks	Next Steps	Ten-Year Vision
Support development of a statewide infrastructure for high-quality professional development that includes (a) intensive content-based learning opportunities; (b) on-site coaching and mentoring; (c) time for collaboration and planning; and (d) technology supports for learning at all times and locations.	SB 1882 (1988) Focuses on developing a statewide infrastructure for teacher professional development. Authorizes the Subject Matter Projects for intensive content-based learning opportunities, the California Professional Development Consortia for regional coordination and service delivery, and school funds for professional development planning.		As originally envisioned with SB 1882, California's professional development system is built upon high-quality institutes within each of the subject areas; regional centers that support districts and schools in planning and implementation; and site-based time for teacher collaboration, mentoring, and coaching. All teachers and administrators have ready access to intensive professional development, on-site coaching, and support for local planning and collaboration, both face-to-face and through technology.
Stabilize funds for intensive, content-based institutes, such as the Subject Matter Projects, the California Professional Development Institutes, and other high-quality providers. Include funds for both summer training and follow-up coaching within schools, and encourage partnership programs.	Subject Matter Projects Funds awarded to UC for teachers participating at 129 regional sites, mostly on postsecondary campuses. Programs are discipline-based, two- to three-week summer intensives. California Professional Development Institutes, AB 2881 (2000) Provides UC with funds to administer institutes in higher education institutions.		All California teachers periodically participate in intensive content-based institutes with follow-up coaching at their schools. Teachers are compensated as part of their salary packages. The Subject Matter Projects, California Professional Development Institutes, and other providers integrate face-to-face and online learning strategies.
Provide flexible funding and examples of how districts can combine funding sources to create a coherent approach to professional development for improving student learning. Replace program compliance with accountability for student results.	Categorical Education Funding Flexibility, AB 615 (2000) Grants authority for districts to pool categorical funding from specified sources to develop local programs.		Flexibility in pooling funds makes it possible for districts to focus on what is needed to support student learning rather than program compliance. Communities have information and assistance to realign resources to match student learning needs identified through performance data.

Recommendation 6 (Continued)

Actions	Building Blocks	Next Steps	Ten-Year Vision
Assist schools and districts in developing and implementing professional development plans that incorporate features of effective school-based professional development, such as those articulated in <i>Designs for Learning</i> .	California Professional Development Consortia (CPDC), SB 1882 (1988) Supports 11 regional centers that coordinate and deliver professional development services. Supports such initiatives as National Board Certification, PAR, standards implementation, and professional development planning using Designs for Learning as a framework. AB 341 (2001) Provides funds to develop professional development standards based on Designs for Learning that may be used to develop, align, and evaluate local professional development programs. Must include standards for coaching and mentoring beginning and veteran teachers. Beginning Teacher Support and Assessment Jointly administered by the California Department of Education and CCTC. Requires teachers to participate in a two-year induction program to receive a Professional Credential, beginning in 2004.		School-based professional development is built on standards —teachers meet regularly to talk about instruction, to develop lessons and assessments, and to discuss student work. Their collegial work is reflective, inquiry-driven, and supported by Web-based tools and resources. Well-funded regional professional development centers coordinate regional services and provide technical assistance to districts and schools in designing high-quality professional development programs.
Develop coaching for both beginning and veteran teachers. Provide common training for mentors, cooperating teachers, and university and school supervisors based on CSTP standards and documentation of successful coaching models. Fund regional centers to support districts by training mentors, coaches, assessors, and support providers.	Peer Assistance and Review, AB IX (1999) [PAR replaced the Mentor Teacher Program in 2001] Funds local educational agencies to develop programs in which exemplary teachers consult with less successful teachers in content and pedagogy and to develop a comprehensive professional development program, including service to beginning teachers. New Teacher Center, AB 1740 (2000) Funds the NTC to continue its innovative work in supporting and training BTSA support providers and coaches for teachers and administrators.		The NTC serves as a research and development site to develop coaches and mentors. The NTC serves as the "trainer of trainers" in support of the 11 regional programs. Districts and consortia of districts provide professional development programs that offer a continuum of support from recruitment through leadership development. Teacher leaders with coaching and mentoring expertise, especially in literacy and mathematics, are readily available to schools that need them.

Recommendation 6 (Continued)

Actions	Building Blocks	Next Steps	Ten-Year Vision
Fund the development of a Web-based support system for teachers and administrators that is available at all times and includes standards- based curriculum resources, professional development resources, and facilitated online training.	California Department of Education Has used federal funds to conduct a Request for Information process from public and private vendors to determine the feasibility and design of such a Web site to develop online opportunities for learning the California academic standards.		California public education agencies have collaborated and pooled resources to develop a Web site that supports teachers throughout their careers. This innovative Web site provides a national model for teacher support. Teachers routinely access wellorganized resources that help them improve teaching.

Recommendation 7. Ensure that high-quality professional development reaches teachers and administrators in high-need communities.

Actions	Building Blocks	Next Steps	Ten-Year Vision
Provide incentives for collaboration between K–12 and higher education to develop stronger preparation programs in high-need communities (e.g., support for professional development schools in	Comprehensive Teacher Education Institutes Awards grants to higher education— school district collaboratives to improve teacher preparation and retention. CSU internal directive Forges K-12 partnerships with schools and districts.		With state support, all colleges and universities work in partnership with local districts to operate professional development schools in high-need communities. These partnerships allow apprentice teachers to learn about the students they will teach and how to be effective teachers.
high-need communities and targeted expansion of CTEI grants).			Funding for CTEIs is commensurate with the need for teacher development in lower-performing districts and schools. Grants continue to support innovative, local partnerships between higher education and K–12 in high-need communities.
Support ongoing, school-based pro- fessional development for schools in high- need communities.	See programs listed in Recommendation 6.		Student achievement is assured because every school is a community of learners, and a fully qualified teacher is available to every child.
Make full use of technology.			The inequitable distribution of technology resources is addressed through concerted efforts to train all teachers to use Webbased tools and access Web-based resources. Sufficient hardware and training are available to teachers in all schools.

Recommendation 8. Improve the preparation, induction, and ongoing support of school leaders so that they are able to lead schools that successfully support student learning.

Actions	Building Blocks	Next Steps	Ten-Year Vision
Develop and fund a comprehensive set of recruitment, preparation, career development, and workplace incentives that addresses the critical shortage of school leaders.	Governor's Principal Leadership Institutes Provides funds to UC Berkeley and UCLA to serve some of the best and brightest teachers and administrators.		Due to recruitment, improved administrator preparation programs, and improved working conditions (e.g., salary, school size, teacher quality, and shared leadership), there is an ample supply of instructional leaders.
Build on the work of the California Administrative Service Credential Task Force to establish leadership development standards that are aligned with student and teacher standards and that ensure knowledge of teaching, learning, and how to manage a collegial environment.	Administrative Service Credential Task Force of the CCTC Will make recommendations about standards for educational leaders.		The California leadership standards describe the skills and experience needed to lead and manage a school. Implementing the standards systematically improves the quality of administrator preparation programs. These standards also help refocus the role of the principal on instructional leadership and encourage job reconfigurations based on different skills and experience needed.
Align credentialing, preparation programs, and support systems with leadership standards. Provide incentives to universities and schools to develop programs for site leadership development that meet leadership standards.	Administrative Service Credential Task Force of the CCTC Will make recommendations about credential requirements for administrators. Governor's Principal Training Act, AB 75 (2001) Provides training to 5,000 school administrators per year for three years. Training is for 80 hours with 80 additional hours of intensive individual- ized support.		The leadership standards guide the redesign and development of Tier I administrator preparation programs throughout California colleges and universities. Successful models developed through the expanded Governor's Principal Leadership Institutes, CSLA, and ACSA also guide program development. Online resources make it possible for administrators to establish and maintain professional communities and access information regarding their ongoing professional development.
Support collaboration between K–12 systems, universities, and other education organizations to provide field-based apprenticeships, coaching, and mentoring, including new administrator induction programs similar to BTSA.	California School Leadership Academy (CSLA) Operates 12 regional School Leadership Centers, which provide professional development programs for administrators. Association of California School Administrators (ACSA) Provides training for the Tier II administrative credential. Also offers a comprehensive array of programs and institutes to (Continued on next page.)		New principals work with a veteran principal to develop their skills in instructional management, shared leadership, teacher evaluation, data analysis, and community engagement. This support is integrated with other standards and professional development for teachers. Theory and practice are linked through coordination between university and field-based components.

Recommendation 8 (Continued)

Actions	Building Blocks	Next Steps	Ten-Year Vision
	develop leadership skills for superintendents, district and school administrators, and teacher leaders. New Teacher Center Works in the area of teacher induction and offers the New Administrators Project in which staff with site administration experience coach and train first-year principals.		
Provide incentives to school districts to develop district/ university partnership "grow your own" leadership preparation programs for highneed communities.			California districts develop a cadre of National Board Certified teachers and other teacher leaders who are finan- cially supported as they pursue their administrative credentials. This support especially helps high-need communities to develop local leadership.

Create the conditions that allow teachers and school leaders to succeed.

Recommendation 9. Reconfigure site leadership to enable the principal to serve as an instructional leader and to support the development of teacher leaders who can coach and mentor others.

Actions	Building Blocks	Next Steps	Ten-Year Vision
Document and disseminate examples of schools that have strengthened their focus on learning and instruction by creating new leadership roles and staffing	Local models Provide release time for teacher leaders and other innovative administrator staffing configurations.		California invests in building or reclaiming a significant number of smaller schools, or schools within schools, operating at the optimal size of 300 to 500 students, particularly in highneed communities.
patterns. Provide funds to implement promising models.			In many schools, a chief operating officer or bursar handles business and facility issues.
Provide incentives and reduce barriers for schools to create shared leadership models that enable more intensive collaboration, coaching, and mentoring focused on improved learning and instruction. Eliminate from the administrative cost formula the time allocated for teachers to assist other teachers.			The principal works as an instructional leader who coordinates and leads a group of teacher leaders. These teacher leaders, including National Board Certified teachers, coach and train new colleagues, design and lead professional development, develop curriculum, and lead ongoing school improvement efforts based on students' needs.

Recommendation 10. Redesign schools so that they can focus on student and teacher learning. Add and reorganize time to enable collaborative teacher planning and inquiry.

Actions	Building Blocks	Next Steps	Ten-Year Vision
Add ten days of state- funded professional development time that can be used flexibly to extend the contract year for teachers (e.g., longer year, longer day).	Instructional Time and Staff Development Reform Provides funds to districts to pay teachers and classified staff for three days of staff develop- ment time.		Teachers have a minimum of ten paid days for professional development and collaborative work, both outside of and during the school year. Professional growth for teachers and administrators is ongoing.
Provide districts with information, technical assistance, and the flexibility to redesign schools and to support time for collaborative teacher planning, coaching, and learning.	California Professional Development Consortia Supports 11 regional centers that coordinate and deliver professional development services. The CPDC supports professional development planning.		The 11 regional professional development centers—collaboratives of BTSA, CPDC, California Technology Assistance Project, local institutions of higher education, and other regional programs—provide technical assistance to schools and districts in redesigning the school day and year to include time for coaching, collaboration, and inquiry. A compendium of innovative practices and scheduling options is available to districts and schools.

Notes

- 1. Murnane, R., & Levy, F. (1996). *Teaching the new basic skills*. New York: The Free Press
- 2. Milken Institute. (1999). *California in the 21st century: State of the state*. Santa Monica, CA: Author.
- 3. Murnane & Levy, 1996.
- 4. National Center for Education Statistics (NCES). (2000). *Digest of education statistics, 1999; Profiles of public elementary and secondary education, 1996-97*. Washington, DC: U.S. Department of Education.
- Monk, D. (1994). Subject area preparation of secondary math and science teachers and student achievement. *Economics of Education Review*, 13(2); Denton, J. J., & Lacina, L. J. (1984). Quantity of professional education course work linked with process measures of student teaching. *Teacher Education and Practice*, 39–64.
- 6. Ferguson, R. (1991, Summer). Paying for public education: New evidence on how and why money matters. *Harvard Journal of Legislation*, 28, 465–98. See also Darling-Hammond, L. (2000). *Solving the dilemmas of teacher supply, demand, and standards: How we can ensure a competent, caring, and qualified teacher for every child*. New York: National Commission on Teaching and America's Future. California studies include Betts, J. R., Reuben, K. S., Danenberg, A. (2000). *Equal resources, equal outcomes? The distribution of school resources and student achievement in California*. San Francisco: Public Policy Institute of California http://www.ppic.org; Fetler, M. (1999, March). High school staff characteristics and mathematics test results. *Education Policy Analysis Archives*, 7(9) http://epaa.asu.edu/epaa/v7n9.html; Los Angeles County Office of Education (1999, May). Teacher quality and early reading achievement in Los Angeles County public schools, 1998. *Trends*, 6(2).
- 7. Council of Chief State School Officers. (2001). *Leadership for learning in the* 21st *century*. Washington, DC: Author.
- 8. National Center for Education Statistics. *National education goals report*, 1999; *The nation's report cards*, 1999, 2000, by subject; Common Core of Data 1999-2000 (as reported in Tables and Figures <*www.nces.ed.gov*>).
- 9. Haselkorn, D., & Harris, L. (2001). *The essential profession: California education at the crossroads*. Belmont, CA: Recruiting New Teachers, Inc., p.16. (Study commissioned by the Center for the Future of Teaching and Learning)

- 10. Shields, P. M., Esch, C. E., Humphrey, D. C., Young, V. M., Gaston, M., & Hunt, H. (1999a). The status of the teaching profession: Research findings and policy recommendations. A report to the Teaching and California's Future Task Force. Santa Cruz, CA: The Center for the Future of Teaching and Learning.
- 11. Policy Analysis for California Education (PACE). (2000). *Crucial issues in California education 2000: Are the reform pieces fitting together?* Berkeley, CA: Author.
- 12. Shields et al., 1999a; California Commission on Teacher Credentialing communication, 2001.
- 13. Shields et al., 1999a.
- 14. Nelson, F., Drown, R., & Gould, J. (2000). *Survey and analysis of teacher salary trends* 2000. Washington, DC: American Federation of Teachers.
- 15. EdSource. (1998). *California's school principals: At the center of school improvement effort.* Palo Alto, CA: Author; www.edsource.org.
- 16. Based on NCES data: U.S. Department of Education, National Center for Education Statistics, Common Core of Data, "State nonfiscal survey and early estimates survey of public elementary/secondary education," 1999–2000 (as reported in Tables and Figures <www.nces.ed.gov>, December 1999).
- 17. EdSource, 1998.
- 18. Information provided by the Office of Educational Demographics, California Department of Education http://data1.cde.ca.gov/dataquest/TchExp1. asp?RptYear=2000-01&TheRpt=StTchExp>.
- 19. Shields, P. M., Esch, C. E., Humphrey, D. C., Riehl, L. M., Tiffany-Morales, J. D., & Young, V. M. (2000). Teaching and California's future. The status of the teaching profession 2000: An update to the Teaching and California's Future Task Force. Santa Cruz, CA: The Center for the Future of Teaching and Learning.
- 20. Shields et al., 2000.
- 21. Newmann, F. M., Smith, B., Allensworth, E., & Bryk, A. S. (2000). *School instructional program coherence: Benefits and challenges*. Chicago, IL: Consortium on Chicago School Research.
- 22. Information provided by the Office of Educational Demographics, California Department of Education.
- 23. Shields et al., 2000.
- 24. Shields et al., 2000, p. 37.
- Shields, P. M., Humphrey, D. C., Wechsler, M. E., Riehl, L. M., Tiffany-Morales, J. D., Woodworth, K., Young, V. M., & Price, T. (2001). *The status of the teaching* profession 2001. Santa Cruz, CA: The Center for the Future of Teaching and Learning, p. 18.
- 26. California Commission on Teacher Credentialing. (2000). *Credentials granted during the fiscal year 1998-99*. Sacramento, CA: Author.

- 27. Shields et al, 2000.
- 28. National Commission on Teaching and America's Future. (1996). *What matters most: Teaching for America's future.* New York: Author.
- 29. Shields, et al., 1999a, p. 76. See also Shields, et al., 2001.
- 30. Shields, et al., 1999a; Imbimbo, J., & Silvernail, D. (1999). Prepared to teach? Key findings of the New York City Teacher Survey. New York: New Visions for Public Schools; Stone, B., & Mata, S. (1998, April). Fast-track teacher education: Are we adequately preparing teachers for California's class-size reduction? Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA; Turley, S., & Nakai, K. (1998, April). When emergency permits abound: Student teaching in the wake of California's class size reduction initiative. CSU Long Beach and UC Irvine. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- 31. Shields et al., 1999a.
- 32. Andrew, M. (1990). The differences between graduates of four-year and five-year teacher preparation programs. *Journal of Teacher Education*, 41, 45–51; Andrew, M., & Schwab, R. L. (1995, Fall). Has reform in teacher education influenced teacher performance? An outcome assessment of graduates of eleven teacher education programs. *Action in Teacher Education*, 17, 43–53; Denton, J. J., & Peters, W. H. (1988). *Program assessment report: Curriculum evaluation of a non-traditional program for certifying teachers*. College Station, TX: Texas A&M University; Shin, H. (1994). *Estimating future teacher supply: An application of survival analysis*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- 33. The programs for which published data provide the basis of these estimates include five-year and four-year programs from an 11-institution study (Andrew & Schwab, 1995), national data on entry and attrition from different pathways (NCES, 1996), and data from studies of the Los Angeles Teacher Trainee Program, the Dallas Internship Program, the Houston Internship Program, and Teach for America (Stoddart, 1992; Wright, McKibbin, & Walton, 1987; Lutz & Hutton, 1989; Maryland State Department of Education). For a fuller discussion, see Darling-Hammond, L. (2000). Solving the dilemmas of teacher supply, demand, and standards: How we can ensure a competent, caring, and qualified teacher for every child? New York: National Commission on Teaching and America's Future.
- 34. Ward, B. A., Dianda, M. R., & van Broekhuizen, L. D. (1992). What was learned? A summary of findings from the independent evaluation of California Teacher Project Support Component (Project Years 1988–1991). Los Alamitos, CA: Southwest Regional Laboratory.
- 35. University of California, Office of the President, Budget Office.
- 36. Michael Kirst, 2000, in a presentation to the Professional Development Task Force.

- 37. Newmann et al., 2000; WestEd. (2000). *Teachers who learn, kids who achieve: A look at schools with model professional development*. San Francisco: WestEd.
- 38. Geiser, K. D., & Berman, P. (2000). Building implementation capacity for continuous improvement. Emeryville, CA: RPP International; Newman, 2001; Wenzel, S. A., Smylie, M. A., Sebring, P. B., Allensworth, E., Gutierrez, T., Hallman, S., Luppescu, S., & Miller, S. R. (2001, July). Improving Chicago's schools: Development of Chicago Annenberg schools, 1996–1999. Chicago: Chicago Annenberg Research Project; Felner, R. D., Jackson, A. W., Kasak, D., Mulhall, P., Brand, S., & Flowers, N. (1997). The impact of school reform for the middle years. Phi Delta Kappan; http://www.pdkintl.org/kappan/karticle.htm.
- 39. Berman, P., & Chambliss, D. (2000). *Readiness of low-performing schools for comprehensive reform*. Emeryville, CA: RPP International.
- 40. Elliott, J., Briggs, D., Goldsmith, S., McCormick, T., & Ashbaugh, J. (2001). *An evaluation of California's comprehensive teacher education institutes*. San Francisco: WestEd.
- 41. Shields, P. M., David, J. L., Humphrey, D. C., & Young, V. M. (1999b). *Evaluation of the PEW Network for Standards-Based Reform: Third year report*. Menlo Park, CA: SRI International.
- 42. Educational Research Service. (2000). The principal, keystone of a high-achieving school: Attracting and keeping the leaders we need. Arlington, VA: Author; ACSA. (2001a). Recruitment and retention of school leaders: A critical state need. Sacramento, CA: Author; ACSA. (2001b). Administrator shortage serious, committee learns; Partnership aims to address principal training; Administrator training bill in Gov.'s reform (ACSA News: EdCal and Leadership); <www.acsa.org/news>.
- 43. Darling-Hammond, L. (1997). *Doing what matters most: Investing in quality teaching*. New York: National Commission on Teaching and America's Future; Ed Source. (2001, March). *Help wanted: Top administrators to lead California schools*. Palo Alto, CA: Author; <*www.edsource.org*>.
- 44. ACSA, 2001a, 2001b.
- 45. Based on NCES data (see note 16).
- 46. EdSource, 1998.
- 47. Shields et al., 1999a.
- 48. Newmann et al., 1999; Darling-Hammond, 1997.
- 49. Stevenson, H. W., & Stigler, J. W. (1992). *The learning gap: Why our schools are failing and what we can learn from Japanese and Chinese education*, p. 164. New York: Summit Books.
- 50. Stigler, J. W., & Hiebert, J. (1999). The teaching gap: Best ideas from the world's teachers for improving education in the classroom. New York: The Free Press.